

# MANUFACTURERS RECORD

A WEEKLY SOUTHERN INDUSTRIAL, RAILROAD AND FINANCIAL NEWSPAPER

Trade-Name Registered in the U. S. Patent Office

VOL. LXV. No. 3.  
WEEKLY.

BALTIMORE, JANUARY 22, 1914.

\$4.00 A YEAR.  
(SINGLE COPIES, 15 CENTS.)

PUBLISHED EVERY THURSDAY BY THE  
MANUFACTURERS RECORD PUBLISHING CO.

RICHARD H. EDMONDS, Pres. VICTOR H. POWER, Treas.  
FRANK GOULD, Vice-Pres. I. S. FIELD, Sec'y.

RICHARD H. EDMONDS, Editor and General Manager

EDWARD INGLE, Managing Editor

ALBERT PHENIS, Staff Correspondent

BRANCH OFFICES:

NEW YORK, 52 Broadway CHICAGO, 1919 Fisher Bldg.  
BOSTON, 643 Old South Bldg. ST. LOUIS, 627-630 Century Bldg.  
NEW ORLEANS, 814 Maison Blanche

Subscription \$4 a year (payable in advance) to United States, Mexico, Cuba, Porto Rico, Hawaii and the Philippines. To Foreign Countries (including Canada) in the Postal Union, \$6.50 a year.

[Entered at the Baltimore Postoffice as second-class matter.]

In order to avoid delays, all correspondence pertaining to news or advertising matters should be addressed directly to the MANUFACTURERS RECORD, Baltimore, Md., and not to individual editors, officers, employees or any branch office.

## SOUTHERN JOURNALISM'S LOSS.

DEATH claimed this week two leaders in Southern journalism—Charles Rittenhouse Pendleton, for fifteen years chief owner and editor of the *Daily Telegraph* of Macon, Ga., upon which he impressed the strength and high tone of his personality, and W. W. Dexter of Houston, editor of the *Texas Bankers' Journal*, which, in the past few years, has made a powerful exponent of the financial interests of the Southwest.

## JOHN SKELTON WILLIAMS, COMPTROLLER.

APPOINTMENT and confirmation of John Skelton Williams as Comptroller of the Currency, which carries with it automatically membership in the Federal Reserve Board under the new currency law, is commended by every American who desires that the business of the people shall be in the hands of personal integrity and courage. The appointment of Mr. Williams as Assistant Secretary of the Treasury less than a year ago was a token of President Wilson's determination to surround himself with the highest type of men at his command. The appointment to the much more important office, and one increased in power by the Federal Reserve Act, emphasizes the Wilson determination.

## MILLIONS FOR STEEL CARS.

THE immensity of the task of replacing wooden railroad cars of the country with steel cars was shown this week by President Charles A. Post of the Railway Business Association of New York when he stated before a subcommittee of the House of Representatives that it would cost \$600,000,000. He estimated that to scrap and replace with steel cars 44,550 wooden ones would require the building of 4455 cars annually for 10 years, in addition to 1550 required yearly to take care of new business, and that would mean a capacity of 6000 cars a year for car-building establishments. So much for the cost of the task and the physical equipment for it. Steel cars must be paid for, and \$600,000,000 do not grow on trees nor can they be picked up from the curbstones. The railroads must, therefore, obtain the money either by way of earnings or through the sale of securities. Securities cannot be sold unless the buyers have reasonable assurance that their investments will bring fair returns, and no earnings will be available for extra expenditures if the rates

of transportation are not sufficient to bring a revenue greater than the cost of operation of the railroad and the amount of existing obligations. Therefore Mr. Post is absolutely correct in his opinion that, as things are now, nobody but the Government, which controls the rates of transportation, can assure the only condition upon which capital can be induced to finance the substitution of steel cars for wooden ones.

## TO CHAIN THE POTOMAC.

IN explanation of his bill carrying an appropriation of \$15,000,000 for hydro-electric development at the Great Falls of the Potomac above Washington, Senator George W. Norris of Nebraska has sketched in an interview in the *Washington Times* a project that will appeal to the imagination of engineers and the general public. His plan looks to the building of a dam 115 feet high that would back up the water to the foot of the Falls without destroying them, and the utilization of a drop of about 33 feet in the water from the dam above the Falls, now constituting the main feature of the water system of Washington. This would give an amount of power of about 12,000 horse-power at the very lowest ebb of the river, with a possible maximum of 130,000 horse-power. Senator Norris' plan takes no account of the possibilities in storage reservoirs, but he says that private engineering concerns have found places where it is perfectly practicable to build storage dams in the gorges of the stream where large volumes of water may be held back, and this, he thinks, will insure substantially 100,000 horse-power for every day of the year. Such power would suffice for the lighting, heating and transportation needs of Washington for many years to come, and, estimating its cost to consumers at \$20 for horse-power a year would yield \$2,000,000 annually, or about 13 per cent. on the investment. Senator Norris looks to the possibility of Government ownership of public utilities calling for the use of electric power, and argues that the cost would, under such auspices, be much reduced for consumers. Be that as it may, the project is interesting as emphasizing the possibilities in hydro-electric development in this country.

## PACIFIC COAST LUMBER FOR THE SOUTH.

WHILE the South has regarded the Panama Canal as a means of access to the markets of the Pacific Coast, of North America and South America and of the far East, it has hardly given full consideration to the possibilities in the use of the canal as the means of reaching Southern markets from the Pacific Coast. Several months ago the MANUFACTURERS RECORD alluded to the inquiries being made by Pacific Coast lumber interests about the opportunities for them in the markets of the South. About the latest inquiry of the kind is from a timber company of Everett, Wash., as to the facilities at Houston, Tex., for handling red cedar shingles. The company says that it has in the past shipped shingles into Texas by all-rail routes, but that it believes that after the opening of the Panama Canal the bulk of the shingles will be shipped from Pacific seaboard towns by water to Texas for distribution to interior points. The company has already taken up the matter with the railroad companies regarding shipments to the interior and with steamship companies regarding the possible rate from Puget Sound to Houston. These inquiries squint toward a possible case of carrying coals to

Newcastle, inasmuch as the South is cutting more than half the lumber of the country, 21,907,519,000 feet in a total of 39,158,414,000 feet in 1912, and Texas cutting nearly 9 per cent. of the Southern output. What effect an expansion of the market for Pacific Coast lumber in the South will have upon the Southern lumbering industry may hardly be forecast. It is a fact, though, that the inroads upon Southern timber resources in the past 15 or 20 years consequent upon the demand for yellow pine have set forehanded men to thinking seriously of means for conserving the supply and, in some cases, to making practical application of well-tested plans for handling the forests economically. It is not likely that the demand for lumber in the country will decrease in any marked degree for many years, however the annual cut may vary from year to year. Possibly the record annual cut has been made and that future outputs will be determined by the ability of the forests to meet a healthy demand without losing any of their potentiality as producers. Such a balancing in the industry which would inure to the benefit of the lumbermen may be induced in the South by this very movement from the Pacific Coast by way of the Panama Canal.

## THE OWNERSHIP OF RAILROADS.

INTERESTING and suggestive facts usually overlooked in discussions of the relations of corporations and the public were brought out in an address last Tuesday at the annual banquet of the Chamber of Commerce of Chattanooga, Tenn., by President Fairfax Harrison of the Southern Railway Co. He took the ground that, in spite of the holding of railroad stock outside of the territories which the railroads serve, and in spite of departures from integrity in the administration of some particular railroads, such has been the development in recent years of the public nature and responsibility of railroad administration, and such have been the practical consequences of that recognition, that at present in every essential a railroad actually belongs to the communities it serves. In that sense the Southern Railway, with its 10,000 miles of lines, on which 59,000 officers and employees perform public services, in return for which more than \$100,000,000 of annual revenue is collected, he contended, belongs to the people of the South, in that it is not only a highway for them to market, but its fiscal operations are part of the life of the communities along its lines. In support of his contention he said:

Of the one hundred and three millions of annual revenue collected last year by the railways included in the Southern Railway System, there was immediately paid out again along its lines at least seventy-six millions, an amount not far short of the total collections from the people of the South, for approximately twenty-two millions of the total revenues were collected from people outside of the Southern States—a fact not often taken into consideration, the explanation of which is that an appreciable part of the passenger traffic of the system consists of the transportation of residents of other localities traveling in the South, and, furthermore, that to a large extent freight charges on Southern products shipped to other localities are paid by the consignees.

What, then, becomes of these great revenues collected in the South. Are they hurried away to some cavern in Wall Street? No. The fact is that all the moneys collected in the South are deposited in Southern banks, which are drawn upon from time to time only as funds are needed for proper fiscal purposes. The funds of the system thus become an important factor in strengthening the banks of the territory, and so are at all times at the service of the Southern people.

I have said that these funds are withdrawn from Southern banks from time to time only as needed for proper fiscal purposes, but even in that operation, to a large extent, the moneys collected for transportation service on our lines are not withdrawn at all from the Southern communities in which they are collected. This can be

demonstrated by an analysis of Southern Railway expenditures for the last fiscal year. Such analysis shows that, of every dollar disbursed, 41.71 cents went to the payment of wages, substantially all of which are paid along the line of the road, and so remain in Southern banks, a disbursement which, for the Southern Railway proper, averages about two million dollars a month. The purchase of materials and supplies used 23.30 cents, and, under our policy of buying as far as practicable from Southern people, 19.12 cents of this was expended in the South and only 4.18 cents in other localities. Miscellaneous operating expenses required 6.09 cents, all spent in the South. Taxes, all paid in the South, required 3.65 cents. Interest, rentals and other miscellaneous payments accounted for 20.83 cents, and the holders of the company's preferred stock received 4.42 cents. It is unfortunately impracticable to determine the proportion of interest and dividends paid to Southern owners of Southern Railway securities. I wish it was all paid to Southern people; but, leaving these entirely out of account, it is seen that at least 70.57 cents out of every dollar expended by the Southern Railway remains in or is brought into the South. It may be added that these figures do not take account of expenditures for additions and betterments, amounting last year to three millions and a half, and in ten years to twenty-seven millions, of which the major part, expended on roadway and structures, was practically all paid out along the line of the road. We may then take it as established that what the Southern people pay the Southern Railway lines for transportation remains a part of the working capital of the Southern people; but it is interesting to pursue the thought a step further to a realization of what these disbursements by the Southern Railway in the South mean in the life and growth of the Southern people. Of the total of seventy-six millions paid out along the Southern Railway lines last year, approximately forty-three million dollars went to the army of 59,000 employees, and thus, on the conventional basis of five to a family, directly supported about 235,000 Southern people, or about six and one-half times the population of Chattanooga at the date of the last census.

President Harrison, advancing a step farther, argued that the real preferred stockholders of the Southern Railway system, in the matter of priority of claim, are the Governments of the States, counties and cities along its line, which received in the way of taxes in the last fiscal year \$3,743,704.39. He said:

It is hard to grasp the significance of figures as large as this; what our tax payments really mean to the communities along our lines can be better understood by an illustrative analysis of our payments on account of school taxes and road and bridge taxes in the Southern States. In 1912 our school taxes in these States amounted to something over \$800,000, or an average of \$2800 for each county traversed by our lines. At the average annual compensation of school teachers in the Southern States, as reported by the United States Bureau of Education, this would more than pay for ten teachers in each county. It represents \$2.64 out of every \$100 of school taxes paid in these States, and amounts to \$15 for each school building in the States traversed by our lines. Every dollar paid to the Southern Railway for transportation charges thus includes a substantial contribution to the maintenance of the system of public education in the South. Payments by the Southern Railway System in the same year of taxes directly assessed for public roads and bridges amounted to \$447,966.63, or an average of \$1571.81 for each county along our lines. Every dollar paid to the Southern Railway for transportation charges thus includes also a substantial contribution to the maintenance of the public highways of the South, and is an indirect but none the less real public support of the progressive movement for good and better roads.

Other indirect interests in the Southern Railway were mentioned by President Harrison, who also dwelt briefly upon the fact that most of the officers of the road are Southern-born men, and invited the Southern people to co-operate with the railway company in making it a more efficient servant of the people. He pledged himself to the memory of the services in the South and for the South of Samuel Spencer and William W. Finley, his predecessors in the presidency of the road, and expressed the hope to carry on their work according to their example and their ideals.

The address was one naturally to be expected of President Harrison, full of hard, common sense and convincing facts. Full appreciation of those facts by the South is bound to result in the co-operation, without which neither people nor railroads may make the most of each other for common good.

### THREE KEYNOTE LETTERS.

HON. G. W. KOINER, commissioner of agriculture and immigration of Virginia, writes to the MANUFACTURERS RECORD:

I don't see how progressive people of the South can get along without your valuable publications. Nothing in this country compares with them. They are chuck full of meat from lid to lid and cover to cover, and give any

business man any information that he would have, setting forth the facts relating to resources of our great coming Southern country.

Complementary to this is a letter from a valued contributor to our news columns, A. Jeffers of Oceana, Va., who, in explaining the care he has taken in preparing an article for us, writes:

Such a journal as the MANUFACTURERS RECORD is held for reference and carefully read by many deeply interested parties. We rely on such data as appears in the MANUFACTURERS RECORD.

In sequence is a letter from P. M. Stallings of Macon, N. C., chairman of the Board of Commissioners of Warren County, in which he says:

We are pleased with results advertising sale \$30,000 Warrenton township road bonds in MANUFACTURERS RECORD. We did not advertise in any other paper, but received 50 or 60 inquiries and a satisfactory bid. Sold at par to Messrs. Sidney Spitzer & Co., Toledo, O.

The aim of the MANUFACTURERS RECORD is to insure accuracy in its columns, because it knows that many persons look to it as an authority and as a source of information about opportunities and advantages of the South. We know that it is not read carelessly, but that it is preserved for reference, and we feel that because of that, because of its readers, not only in the South, but in widely separated parts of the country, who study carefully both its reading pages and its advertising pages, its advertisements bring such results as those suggested by Mr. Stallings.

### TEXAS GOOD ROADS.

IN the past four years Texas has provided for the expenditure of more than \$23,000,000 upon highway improvement by way of bond issues. In 1910 bonds were voted to the amount of \$4,015,000, and in 1913 the amount was \$7,267,700, more than twice as much as was voted in the preceding year. Elections involving \$4,000,000 of bonds are to be decided before April 1 this year, and in practically every county in which an issue of bonds was repeated in 1913 plans are making for a second election. The Texas Business Men's Association, which has compiled these figures from data furnished by commercial organizations, county judges, good-roads associations and other authoritative sources, points out that while there has been a marked increase in bond issues since the law of 1909 went into effect permitting such issues by counties, precincts or road districts, an obstacle has been the requirement of a two-thirds majority vote to carry a bond election. Still, the public spirit manifested in the bond issues of the past few years shows that the determination to have first-class highways is widespread in Texas, and is likely to become deeper and broader with the demonstration of the advantages of good roads.

### SELF-PROPELLED BARGES FOR SOUTHERN STREAMS.

IN connection with an account of the initial trip of the self-propelled steel barge of the Alabama & New Orleans Transportation Co. from the Gulf to the Alabama coal fields last October announcement was made that John H. Bernhard, the general manager of the company, would, in a few months, sever his connection with active participation in its management for the purpose of engaging in other constructive enterprises relating to the development of the port facilities at New Orleans. One of those enterprises is the building of lighter barges in accordance with scientifically developed plans that have been applied to European waters as auxiliaries to the self-propelled steel barge system. The first of these steel lighters was launched last week at the shipyards of the Alabama & New Orleans Transportation Co. on Lake Borgne Canal. According to a statement by James F. Shaw, president of the company, published in the New Orleans *Picayune*, other lighters of similar type will be built.

The lighter, which will be used for coaling ships at New Orleans, has a capacity of 1000 tons that can be unloaded at the rate of 275 tons an hour. It is 245 feet long. According to Mr. Shaw, the Alabama & New Orleans Transportation Co. has already five self-propelling steel barges in commission and

within the next six months will have launched five more, which it is expected will permit the company to have daily steamings both from New Orleans and Tuscaloosa in the Warrior coal fields. The company is convinced that the feasibility of the Bernhard project has been demonstrated by the success of the barges now in commission, and it will increase the fleet to 30 barges and to such a number of steel lighters as may be required to take care of the business. This is gratifying news to every man of imagination to whom the project of Mr. Bernhard has strongly appealed. The self-propelled steel barges, which have proved their worth in the inland waters of the lowlands of Europe, seem destined to become an important factor in the full use of the inland waterways of the South for the development of trade and commerce. They have a freedom of movement not enjoyed by the steamer with its tow, and they can be built in sizes to suit varying conditions. They promise to become for the waterways what the motor vehicles are becoming for the highways on land.

### MOST RICHLY ENDOWED COUNTRY.

At the time last week when much of the North and West was in stress of winter weather the following telegram was sent from Daytona, Fla., to the MANUFACTURERS RECORD:

"The snow covers the North and West, and blizzards sweep over the land, carrying suffering and death to man and beast. The farmers are shut up for the winter, and livestock must be carefully housed and fed, adding enormously to the cost of all operations. Railroad tracks are blocked with snow, and, according to press reports, the biting blizzard holds the West and the North in its icy grasp. But in Florida the roses and Royal Poinsettias are in their glory, the truck fields are green with early peas, asparagus and other vegetables now being shipped by full trainloads daily to the North and West. Strawberries are ripe. The trees are loaded with oranges and grapefruit. The farmer can work 12 months in the year, against six for his Northern or Western competitors. The railroads are put to their wits' end, not to move snow, but to provide cars for the incoming winter visitors and to carry out the splendid trucking and citrus fruit crops to feed the people of less favored regions.

"Florida is typical in many respects of much of the coast region that stretches from Norfolk to the Rio Grande. In so Heaven-favored a State as this the flowers are blooming, the mocking-birds are singing, and all nature is vocal with praise for such blessings. The contrast is great, and every year as it becomes better understood the army of settlers moving Southward must of necessity rapidly increase. There is room enough and to spare for all. Come South, young man; come South, aged man. Here is Nature's most richly endowed country.

R. H. E."

### Southern Drainage Enterprises.

Reports for several Southern drainage districts have recently been completed by the Atlantic Engineering Co. of Savannah, Ga., which outlines these enterprises as follows:

"On December 3 complete and final report, maps and plans for Broad River Drainage District, Franklin and Stephens counties, Georgia, was filed with Drainage Court, Franklin county; plans contemplate dredging 17½ miles of Broad River, about 7 miles of tributaries and 3 miles of small hand ditches; estimated cost about \$96,000; 3000 acres rich bottom lands will be reclaimed. On December 22 complete and final report on Buck Creek Drainage District No. 1, Horry county, South Carolina, was filed with the clerk of court of that county, this report including and being supplementary to the report made by F. G. Eason, United States Drainage Engineer for District of South Carolina, for United States Department of Agriculture. These plans include about 14 miles of dredge channels and 23½ miles of small hand ditches; estimate of cost is about \$73,000, and about 17,500 acres of land will be drained by these improvements. On January 15 complete and final report on Jacks Creek Drainage District, Walton county, Georgia, was filed with the Drainage Court at Monroe, Ga. These improvements contemplate about 7¼ miles of dredge channel and about 5 miles of small lateral hand ditches; estimated cost is \$23,000, which will reclaim 900 acres of very rich bottom lands."



# World Influence of the Panama Canal

[Editorial Correspondence Manufacturers Record.]

Daytona, Fla., January 16.

If we could conceive of the creation of a new world, which over night was joined to the earth, with a population equal to half that of the globe—a new world with 800,000,000 or more of people ready to enter actively into the broadest business development—the opportunities for the people of this country to do business with the newly-made world would not be greater than the opportunities for the people of the country which will be brought into existence by the opening of the Panama Canal.

The cutting of the Isthmus of Panama marks the mightiest change in the world's material affairs since the discovery of America. The effect will be vastly greater on all business activities than was the opening of this country to the daring pioneers who after 1492 began its settlement and development. It would seem that the Panama Canal will come in the fullness of the Almighty's time when, by reason of the development of transportation of things and of thoughts by rail and by water, by the telegraph and the telephone and the wireless, all the earth has been brought into closer touch. Distance has been eliminated. China, so far as intercommunication is concerned, is but a next-door neighbor far closer in many respects than Maryland and Carolina were less than three-quarters of a century ago.

For more than 100 years people from all parts of the world have been meeting and mingling in the United States. This country has been like a great university attended by millions of students who have come from every land on earth. Here they have been learning our civilization, our form of government, our religion, and carrying back to their native land, as they have gone home for visits or to stay, everything that they have learned while in this great world-school. Never before, so far as man can judge, was the time for breaking down the barriers which separate the Atlantic and Pacific so propitious as at present. Largely through the world-wide influences exerted by this country as a training ground for the people of all nations, many hitherto backward countries are rapidly coming to the front. The marvelous changes taking place in these countries and the equally marvelous changes which have been wrought by the development of railroads, the building of steamships, the utilization of electric power and the transmission, with the speed of lightning, to every part of the earth of messages of business or of public affairs will make the opening of the Panama Canal a worthy celebration of the mighty revolutionizing forces which have been at work. It will crystallize the thought of the people of every land upon these things. In every hamlet, from the far Himalayan Mountains to the wilds of the Andes, from Siberia to the utmost limit of South America, and throughout Europe, the people of all classes will feel directly or indirectly its influence and will be stimulated with new life and given a broader vision of the limitless possibilities for industrial and commercial expansion and human advancement.

To no other part of the world will this canal be of such transcendent importance as to the South. This section, by virtue of its natural resources and geographical location, should become what Commodore Maury predicted for the Gulf of Mexico more than 50 years ago, when he declared that the breaking down of the barrier that separated the Atlantic and Pacific would focus the world's commerce in the Gulf. Not only the world's commerce, but the world's industrial and business activities will be focused in the South if this section takes full advantage of what the Panama Canal will mean. As yet, however, the South is doing comparatively little to show its recognition of the supreme importance of the completion of this, not only the mightiest engineering feat ever accomplished by man, but the mightiest achievement ever made by man in the reshaping of the world's material activities. The South, however, has not yet seriously taken hold of the proposition, nor have Southern railroads yet undertaken to provide such terminal facilities as will be needed. South American ports, on the other hand, both on the East and West coast, and the great shipbuilding firms of Europe and Asia are showing their realization of what the canal will mean.

One South American port, to get ready for the canal, is spending \$20,000,000 for harbor improvements. If any port in the South should outline a plan of development on so broad a scale the people themselves would be almost staggered at so daring an undertaking. And yet,

the \$20,000,000 that is being spent by one port is but a small part of the many millions that are being expended by South American ports. These South American cities have for some years shown an appreciation of the need for great harbor improvements to a larger extent than our American ports. We have done very little in this country yet even in the North as compared with what many of the ports of Europe have done and are doing to provide the amplest facilities for the shipping trade. Manchester dared to undertake the expenditure of many millions of dollars which eventually ran, I believe, including kindred developments, to about \$75,000,000, in order to make of itself one of the world's great ports. And yet Manchester's opportunity was very small as compared with that presented to the leading ports of the South. Many of the smaller cities of South America, almost unknown to the majority of our people, are spending more money for harbor improvements than any city of the South, Baltimore included. In the last seven or eight years Baltimore has boasted very much of an expenditure upon municipal docks of \$6,000,000 or \$7,000,000. Its work in this direction has been broadly heralded throughout the country. But South American ports, with much smaller population than Baltimore's, undertake greater things in harbor improvements. Especially is this true since the realization of the potentialities of the Panama Canal. It is not simply the fact that the canal, which "divides a hemisphere and unites a world," will lessen distances. That in itself is a big thing, but that mere fact is small in comparison with the tremendous influence which will flow from the construction of the canal, into the arteries of trade, stimulating all the world into wider activities.

The steamship lines of Europe and the Orient are already building great fleets in order to be ready to meet the changed conditions which will reshape the world's affairs from the day the waters of the Atlantic and Pacific meet for commercial use. It is said that some 60 steamships, averaging over 10,000 tons each, are now under construction for the Panama Canal trade. Probably a much larger number are under contemplation by the companies who are building these, as well as by other companies who are looking to an active part in the trade to be developed by reason of the canal.

In advance of its completion, the capitalists of the world have been searching out opportunities for trade in South America and in the Orient and in studying the resources of these regions. To the vast supplies of copper ores known for many years to exist on the West Coast of South America and which now are shipped largely to Wales to be smelted, have been added discoveries in Chile of millions of tons of what is claimed to be the highest grade of iron ore known, and of almost limitless millions of high-grade ores in Brazil. These rich mineral regions, lacking the fuel, must find an outlet for their ores in shipment to regions where fuel is abundant.

No other section of the world is so well supplied with fuel as the South. That it has twice as large an area of coal as Europe is important, but it is even more important that three-quarters of the coking coal of the United States is in the Southern States. These ores from South America, whether copper or iron, should be smelted at Southern ports, where they can meet the coking coal of this section to better advantage than anywhere else. Schwab of the Bethlehem Steel Co. is planning to build a large fleet of steamers to bring ores from Chile through the canal to his works at Bethlehem, Pa. How much better would it be for these ores to be smelted at Southern ports, saving the great distance from Gulf ports to Philadelphia and the reshipment to Bethlehem.

If we once permit the line of development of South American ores to be headed straight for Northern smelting points, it will be difficult to change the trend and turn them to the South. These South American countries have already made great progress, but they are getting ready for a progress as much greater than that of the past as is the development of the South of today greater than that of 25 years ago.

And then, when we turn from Central and South America to the Orient, we find nearly one-half of the world's population in the infancy of the development of material affairs along Western or Occidental lines. Asia has vast natural resources, but for the next quarter of a century it will be so busy in improving material conditions, building railroads, modernizing and rebuild-

ing its cities, constructing electric-light and water-works and sewerage systems, that, however rapidly it may utilize its own resources for supplying its own needs, it must of necessity be an enormous buyer of the machinery and equipment needed for these things. Every advance in modern methods made by Asia, with its half of the world's population, will mean the swelling of commercial activities of all the world.

The change in China, a country which was old when Moses led the Children of Israel out of Egypt, to a republican form of government and the change indicated in the spirit of its people when a few months ago a request was sent forth that the Christians of the world would unite in prayer that China might be Divinely guided in the formation of its government, are merely indications of that mighty stirring upheaval which is taking place throughout all the world.

The Panama Canal will bring together all the nations of the earth in celebrating an event of stupendous importance. In every legislative assembly in the world, in every newspaper on earth, there will be discussions about the canal and its influence on material and ethical relations. Everywhere men will plan and project business operations with the thought of the influence of the canal on the stimulation of trade and industry. Annually thousands of ships will touch Southern ports or come into the range of Southern business influence by reason of the canal which would not have come without it. It is time for the South to be waking up to the importance, not merely of the canal in itself, but to the importance of the mighty changes going on throughout the world, and of which the canal is merely an expression or indication.

Were the new world created over night and joined, Siamese-twin like, to old mother earth, opening up with 800,000,000 people, ready to begin the development of a richly-endowed region, we would all stand bewildered and amazed at first, but the instinct of trade and commerce which is born in every human being with normal sense would quickly stir the people of every nation to rush in and claim a share of this marvelous opportunity. The newspapers everywhere would be filled from day to day with wonderful stories of the newly-made world and its people and its resources. And yet it would be scarcely possible for the newspapers to give more attention to that imaginary newly-made world than they will give to the Panama Canal and what it typifies in the advancement of civilization and the advancement of human progress from the day the first ship of commerce passes from the Atlantic and steams out upon the Pacific.

It is proposed that the war fleets of all nations shall be represented by a great gathering at Hampton Roads, and that these combined fleets shall in stately procession pass on down the coast and through the Gulf of Mexico to take part in the celebration of the opening of the canal. It is not warships, however, that should be called upon for such a celebration so much as the ships of commerce, the harbingers of civilization, the mighty factors in bringing all the nations of the earth into closer touch.

The meaning of the Panama Canal is not that of war, as represented by death-dealing battleships. It will rather mean the hastening of the time when war has been done away with. It will mean the hastening of the coming of the Prince of Peace on earth. It will mean the extension of commerce, the bringing together of all the people of all races and countries into great commercial activities.

The seemingly impassable barrier of the mighty mountain range stretching from West Virginia to Northern Alabama, that before 1800 separated the West and the South, prevented or restricted business acquaintanceship of the two sections. In the day when Hayne was struggling to secure the building of a railroad from Charleston to Cincinnati, long before others saw signs of the coming war, he took the ground that the construction of such a road would develop trade relations and personal acquaintanceship which would break down the hostility between the two sections and make war impossible. It is not conceivable that the South and the West and the North, with all the intimate ties of friendship and business which have come about of recent years, because the mountains have been pierced and railroads have been constructed from the West into the South and from the North into the South, could ever again be driven on sectional lines into bitter warfare.

The power of trade and commerce in bringing people together has largely been instrumental in creating the present intimate ties between all sections, because fol-

lowing trade and commerce have come personal acquaintanceship and friendship.

As with this country, so with the world. The breaking down of the barrier which separates the Atlantic and Pacific with all the teeming activities of Europe and the eastern part of the United States, from the intimacy and relationship which will exist with the Orient and with South America by reason of the influence of the canal, ought to make war impossible. It would be well, therefore if the President of the United States, as he invites the nations of the earth to send their greatest battleships to join in the procession from Hampton Roads to Panama, to invite every great steamship company in the world to send some of its best and biggest ships to form a procession indicative of commerce rather than of war. To these steamship companies it might be a costly undertaking, but it is altogether probable that the men who head the great steamship lines of all lands would be broad enough to see the meaning of such an invitation and the influence which it would exert upon the world's trade, justifying this individual expenditure by every important company. Perhaps such a move could possibly be made profitable, for tens of thousands of people would be glad to be participants as passengers in this the greatest maritime event in the world's history.

The opening of the Panama Canal may well be celebrated, not so much as a matter of great strategic importance in warfare, as the marking of the beginning of the greatest commercial activities which the world has ever known.

R. H. E.

### The Birmingham Iron Market.

[Special Correspondence Manufacturers Record.]

Birmingham, Ala., January 19.

Buyers and sellers, who have been "see-sawing" for the past two months as to prices and tonnage to be booked, have at last gotten together on a mutually satisfactory basis—both interests meeting certain concessions. Therefore, there has evidently been a turn in the "long land of silence," and the week's transactions have rolled up a tonnage for the district of from 75,000 to 100,000 tons for delivery during the first and second quarters of the year. In a few instances second quarter sales were made independent of the first quarter at the regular base price. The bulk of the tonnage booked was of the lower grades. While the large pipe company was the heaviest buyer, yet many of the smaller users very comfortably cared for their needs. In addition to the booking of a large tonnage of iron, inquiries have been more numerous, thus leaving quite a large tonnage pending. The furnace companies also report that shipping instructions have been given for quite a large tonnage that has been held up for some time. These facts they consider a fair indication of returning confidence in conditions by buyers. In addition to improved Southern conditions, the trade papers report a substantial improvement in the East and Middle West, and particularly an advance of \$1 per ton in the Buffalo district. These conditions, of course, are reflected South. Structural shapes and wire products have shown an advancing tendency, as well as bars and sheets. The Southern Railway Co. and the Seaboard Air Line are in the market for practically 50,000 tons of steel rails, and it is reasonable to suppose that the entire tonnage will be taken on by the Tennessee Company for production at its Ensley mill. The following table approximately represents the Southern pig-iron market prices:

- No. 1 foundry and No. 1 soft, \$11.25 to \$11.50.
- No. 2 foundry and No. 2 soft, \$10.75 to \$11.
- No. 3 foundry, \$10.25 to \$10.50.
- No. 4 foundry, \$10 to \$10.25.
- Gray forge, \$9.75 to \$10.25.
- Basic, \$10.50 to \$11.
- Charcoal iron, \$23.50 to \$24.

In the Connellsville coke district during the past week there were put out of commission over 2000 ovens. It will not take long for this action to have its effect on Southern coke. Already the demand for coke in and out of the district is quite active. Prices remain firm at \$2.50 to \$2.75 per net ton for furnace or smelter coke, and \$3.50 to \$3.75 per net ton for strictly hand-picked foundry coke.

The demand for cast-iron pipe during the week continued at a very satisfactory rate, and some large bookings in the Middle West were reported, one municipality closing for 15,000 tons. Prices have not advanced, but are being firmly maintained. Following prices are

quoted per net ton f. o. b. cars Birmingham: Four-inch, \$22; six-inch and over, \$20, with \$1 per ton extra for gaspipe; fittings, 2½ cents per pound.

At last the old material market has shown some signs of life. This material has been on the "lethargic list" for several months past. However, this condition was anticipated by dealers shortly after the new year's inventories. With the buying of pig-iron and steel-making irons naturally comes a demand for scrap of all kinds. Dealers quote approximately the following prices per net ton f. o. b. cars Birmingham:

- Old iron axles (small), \$15 to \$15.50.
- Old steel axles (light), \$15 to \$15.50.
- Old iron rails, \$12.50 to \$13.50.
- No. 1 railroad wrought, \$12 to \$12.50.
- No. 2 railroad wrought, \$10 to \$10.50.
- No. 1 country wrought, \$9.50 to \$10.
- No. 2 machinery cast, \$10.50 to \$11.
- No. 1 steel scrap, \$10.50 to \$11.
- Tram car wheels, \$10.50 to \$11.
- Standard car wheels, \$12 to \$12.50.
- Light cast and stove plates, \$9 to \$9.50.

The furnace stack of the Central Coal & Iron Co. at Holt, Ala., will be blown out the coming week for certain repairs. No definite date has been set for its blowing in again.

The machinery in the plant of the American Steel & Wire Co. at Fairfield has been thoroughly tested out, and during the past week some of the products of the company were turned out. General Manager Lutz, who has charge of operations of the company, has not formally announced that the company is manufacturing products for the market, as it is the policy of the company to thoroughly try out and satisfactorily test its products before putting them on the market for consumption. When in regular operation this plant will employ about 1500 men. It will receive its billets from the Tennessee Company, whose plants are located to the north of the wire plant about one mile and a half.

### Purchased Arkansas Public Utility Plants.

Having arranged the purchase of various public utility plants in Arkansas, the Arkansas Power Co. of Little Rock writes to the MANUFACTURERS RECORD as follows:

"We have taken over the Malvern Electric Co. at Malvern, the Arkadelphia Light Co. at Arkadelphia, the Wilson Water & Electric Co. at Arkadelphia, the Camden Light & Power Co. at Camden and the Standard Light & Ice Co. of Magnolia. We will make some improvements at all these plants, and will likely connect some of them with transmission line from central generating station, and will in a short time be in the market for two 500-kilowatt steam turbines, switchboards, transformers and transmission line material."

### Additions to Sulphur Plant.

[Special Correspondence Manufacturers Record.]

Freeport, Tex., January 17.

Plans for the installation of the new superheated water, power and pumping plant at the mines of the Freeport Sulphur Co. at Bryan Heights, the loading machinery at the field and steamship dock and the three-mile canal and pumping station are well under way. It is expected that actual construction on these \$150,000 improvements, contracted for as part of the 1914 expansion at the mines, which has suffered some delay due to flood conditions, will soon be started, now that material can be moved to Freeport by rail and water routes.

A. W. DAVIS.

### Texas Industrial Congress.

The fifth annual convention of the Texas Industrial Congress, which was postponed from December 13 on account of the serious illness of Col. Henry Exall, will be held during the National Corn Exposition at Fair Park, in Dallas, on February 21. The prizes offered by the congress for the largest net profit per acre in the several lines of farming, aggregating \$10,000 in gold, will be distributed at the convention, and the program, to include a public memorial service in commemoration of the great, unselfish service of Colonel Exall as president, will be announced later.

### PORTLAND CEMENT IN 1913.

#### Geological Survey Estimate Shows Nearly Ten Million Barrel Increase Over 1912.

According to returns received by the United States Geological Survey up to January 12, 1914, it is estimated by Ernest F. Burchard that the quantity of Portland cement manufactured in the United States in 1913 was approximately 92,406,000 barrels compared with 82,438,096 barrels in 1912, an increase of about 9,967,904 barrels, or 12 per cent. The estimated shipments of Portland cement during 1913 were 88,853,000 barrels, compared with 85,012,556 barrels in 1912, an increase of about 3,840,400 barrels, or 4.5 per cent. On account of a large surplus of production over shipments, stocks of cement at the mills apparently increased more than 45 per cent., or from 7,811,329 barrels in 1912 to 11,375,000 barrels at the close of 1913. In 1913 the relations between production and shipments were the reverse of those for 1912, when shipments exceeded production. It may be necessary to revise considerably the estimates of stocks, but it is believed that these figures for production and shipments are very close to those that will be shown by complete returns from all producers.

Although few definite statements as to selling prices are at hand, it is evident that the average value per barrel was appreciably higher than in 1912. Increases of 10 to 25 cents a barrel are reported from several plants in the Central and Eastern States, but there were slight decreases reported from a few plants in the Rocky Mountain district.

Two new plants, both in Washington, were added to the list of producers during 1913.

The following table gives, in barrels by commercial districts, the estimated production, shipments and stocks for 1913, and the actual production, shipments and stocks for 1912, together with the per cent. of change:

	1912.	Estimate, 1913.	Change, Per cent.
<b>Lehigh District (Eastern Pa. and Western N. J.).</b>			
Production.....	27,682,083	27,679,000	Increase 9.4
Shipment.....	26,013,891	26,734,000	Increase 2.8
Stock.....	1,927,495	2,332,000	Increase 21.0
<b>New York State.</b>			
Production.....	4,492,806	5,298,000	Increase 15.9
Shipment.....	4,543,060	5,239,000	Increase 15.3
Stock.....	555,989	430,000	Decrease 22.7
<b>Ohio and Western Pennsylvania.</b>			
Production.....	7,359,402	7,704,000	Increase 4.7
Shipment.....	7,398,753	7,302,000	Decrease 1.3
Stock.....	640,672	1,027,000	Increase 60.3
<b>Michigan and Northeast Indiana.</b>			
Production.....	4,308,645	5,065,000	Increase 17.6
Shipment.....	4,417,808	4,967,000	Increase 12.4
Stock.....	515,619	609,000	Increase 18.0
<b>Southern Indiana and Kentucky.</b>			
Production.....	3,091,693	3,096,000	Decrease 2.8
Shipment.....	3,134,841	2,861,000	Decrease 8.7
Stock.....	285,422	437,000	Increase 53.1
<b>Illinois and Northwest Indiana.</b>			
Production.....	10,659,357	12,406,000	Increase 16.4
Shipment.....	10,677,479	11,566,000	Increase 8.3
Stock.....	1,106,547	1,942,000	Increase 75.5
<b>Southeastern States (Ala., Ga., Md., Tenn., Va., W. Va.).</b>			
Production.....	4,737,257	5,724,000	Increase 20.8
Shipment.....	5,081,209	5,492,000	Increase 8.1
Stock.....	348,182	623,000	Increase 78.9
<b>Iowa and Missouri.</b>			
Production.....	7,583,933	8,427,000	Increase 11.1
Shipment.....	7,804,901	7,962,000	Increase 2.0
Stock.....	893,720	1,363,000	Increase 52.5
<b>Great Plains States (Kans., Okla. and Central Texas).</b>			
Production.....	5,807,043	6,200,000	Increase 6.8
Shipment.....	6,174,085	6,090,000	Decrease 1.4
Stock.....	708,657	789,000	Increase 11.3
<b>Rocky Mountain States (Col., Utah, Mont., Ariz., W. Tex.).</b>			
Production.....	2,299,252	2,671,000	Increase 16.2
Shipment.....	2,234,602	2,568,000	Increase 14.9
Stock.....	222,057	312,000	Increase 40.5
<b>Pacific Coast States (Cal. and Wash.).</b>			
Production.....	7,336,715	8,916,000	Increase 21.5
Shipment.....	7,531,927	8,072,000	Increase 7.2
Stock.....	696,989	1,511,000	Increase 148.9
<b>Total.</b>			
Production.....	82,438,096	92,406,000	Increase 12.1
Shipment.....	85,012,556	88,853,000	Increase 4.5
Stock.....	7,811,329	11,375,000	Increase 45.6

### For a \$500,000 Bridge.

Bonds to the amount of \$500,000 have been voted by Hamilton county, Tennessee, for the construction of a bridge across the river at Chattanooga. Engineers are invited to submit designs and estimates for this structure, the design to be approved by the United States War Department after its adoption by the Tennessee River Bridge Committee. This competition is in charge of the committee, Theodore F. King, chairman, Chattanooga, who will furnish details to inquirers.

The Tennessee Coal, Iron & Railroad Co. has contracted to sell not less than 200,000 tons of coal in 1914 for fuel to the Nashville, Chattanooga & St. Louis Railway.



# To Meet the Emergency in Louisiana Sugar Raising

[Special Correspondence Manufacturers Record.]

New Orleans, La., January 16.

Very serious and thoughtful consideration is being given here to the grave question of what is to become of the sugar-raising industry of Louisiana. Some planters particularly well equipped and skilful in managing have announced that they will go ahead with sugar-raising, with the idea of instituting economies and improvements that it is hoped will make it possible to raise sugar even without the tariff. Other planters see no hope whatever, and are confronted with a very gloomy outlook. Sugar-growing is a very expensive undertaking, involving a large outlay for machinery, which is useless for any other purpose, and requiring a large investment in implements, buildings, land and seed cane. The planter has to be financed by his banker, and it goes without saying that unless there is a fair prospect of him coming out even, it would be impossible to secure financial assistance to carry on his work. Undoubtedly, there will be instances where a planter will be forced out of business and driven bankrupt from his plantation. Wherever possible, sugar planters will continue to put in crops, but the outcome is regarded as uncertain by even the most courageous and optimistic.

A notable instance of the determination to take advantage of every possible method for continuing the business is furnished in the case of Mr. Chas. Godchaux, who has resigned the important position of president of the Whitney Central National Bank of New Orleans, in order to give exclusive attention to the affairs of the Leon Godchaux Co., Ltd., owner of some 40,000 acres of land, half of which is usually planted in sugar-cane. Mr. Godchaux proposes to devote his entire time to the study of the problems which the sugar planters of Louisiana are confronted with, in the hope that some solution may be reached which will make it possible for the sugar industry to survive. One of his suggestions is that arrangements be made to refine at a plantation refinery not only Louisiana sugars, but those of Cuba and Porto Rico, so that instead of operating expensive plants for only a few months in the year, they may continue in operation the year around. In connection with this proposition, the suggestion is made that co-operation be effected between planters by which refined sugars can be prepared for the market and sold through an organization of planters, instead of having to go through the present channels, the American Sugar Refining Co., et al.

The suggestion is made in many quarters by newspapers, publishers and others that the sugar planter should go into the raising of staple crops, and also hogs and cattle. Where intelligent efforts have been made in that direction Southern Louisiana has been found to be altogether adapted to hog and cattle raising, a bunch of hogs having recently been marketed from some reclaimed land in the Raceland district and bringing a premium of a cent a pound in the Fort Worth market. That the sugar men could immediately make the transition from sugar-planting to stock-raising is not generally accepted as feasible. The sugar planter, as a rule, knows very little about hog and cattle raising, and some instances of failure through lack of knowledge are quoted as likely to be deterrents that will at least make them rather cautious in undertaking this line of industry. Nevertheless, it would seem to be the logical conclusion that in the course of time there must be a very large increase in the raising of corn and staples, and a marked growth in the number of places where hogs and cattle are raised, to a greater or less extent.

One very interesting possibility is in the line of a gradually extended development of orange and grapefruit culture. A Canadian syndicate has under option about 9000 acres of land in Plaquemines parish, forming a part of three plantations owned by Ex-Governor H. C. Warmoth. A representative of this syndicate, Hon. Edmund Bristol, member of the Canadian Parliament and general counsel of the New Orleans Southern & Grand Isle Railroad, was a recent visitor to this section, and spoke most enthusiastically of the possibilities of orange-growing in Southern Louisiana, where conditions are declared to be very much superior to those in California. Mr. Bristol stated that his syndicate had under consideration a plan to colonize a portion of the Warmoth lands with orange growers, and that he hoped in the course of time to have thousands of orange trees

on the property. He was enthusiastic over the Louisiana orange on account of its superior qualities of juiciness and sweetness and declared that with the advantage of a dollar a box in transportation charges, Louisiana ought to be able to surpass California as an orange-growing State.

While plans are not yet definitely worked out, it is announced that the New Orleans Lake Shore Land Co., which is developing a tract on Lake Pontchartrain, a few miles from the heart of New Orleans, is proposing to very extensively engage in orange culture.

The wet lands to the south of New Orleans are pointed out as containing enormous possibilities in citrus fruit culture, and the suggestion is even made that in the course of time all these lands will be reclaimed and largely devoted to orange-growing. Their location near the Gulf and the protection the waters of the Gulf give are points which make these lowlands conspicuously suitable for citrus fruit-growing.

It will take some time to work out the problems which the change in the tariff has forced on the people here, but with such marvelously rich soil it is not doubted that a readjustment will be made in the course of time that will permit the development of the great natural resources of this section. It is regretted that the administration did not see fit to make a gradual reduction

in the tariff, say 5 per cent. per year for 20 years, or even 10 per cent. per year for 10 years, which would have enabled the sugar planter to adjust himself, whereas the drastic manner of tariff removal has hit him a blow that staggers him. There is some hope against hope that a readjustment and more gradual revision may be provided for, but in plans being made for the future the people are attempting with all courage and as much optimism as they can command to work out the problem with conditions as they stand.

Regarding the attitude of New Orleans banks toward the sugar planter under present conditions, Mr. Sol Wexler, who succeeds Mr. Godchaux as president of the Whitney-Central Bank in a dictated answer to some questions said:

"Your question as to the attitude of banks generally, concerning the sugar industry in this State, I could only answer as far as same applies to this institution. It is impossible for any bank to lay down a definite policy in a matter of this kind, as each particular transaction must rest entirely upon its own merits.

"We have confidence that the sugar industry in this State has not been destroyed, but needs readjustment, more businesslike and economic methods.

"We think it likely that we have seen the worst in the prices of sugar, and, as far as we can judge, a very much more hopeful feeling prevails.

"Such persons engaged in the industry as are entitled to credit upon a sound banking basis will receive it at the hands of this bank, whether they are engaged in the business of raising sugar or any other line of business, there being no prejudice nor favoritism against or for any particular line of industry." ALBERT PHENIX.

## Earth Roads Construction and Maintenance\*

By E. A. KINGSLEY of Little Rock, formerly State Highway Engineer.

In the more thickly settled sections of the country earth roads are being rapidly replaced with those having a hard wearing surface. Increased vehicle traffic and the rapid advance of automobiles have forced many communities to build roads to stand the additional wear and tear required of them. But the old-time earth road is by a large majority the big end of the present-day problem, and it will continue to be for many generations to come. The importance of matters pertaining to the construction and maintenance of earth roads may be realized when we consider that fully 90 per cent. of the more than 2,000,000 miles of road in the United States are earth roads. Gradually the main roads, as traffic demands, will be improved with a more permanent surface, but there will always be many roads and for many years many main roads which will remain as earth roads. Rather than attempt to relegate to the dark ages the earth-road problem, we must face conditions as they are, and as they will be for many years to come. We must realize that the earth-road question is a problem—a neglected problem—and that it must be solved. More attention must be given to earth road construction and more intelligent care must be given to maintenance.

One of the main reasons for poor earth roads is absolute lack of system in either construction or maintenance. It has become largely a custom to neglect entirely any thought in connection with either the location or construction of this character of road. In no small measure this is due to one political system. The road foreman is often a man appointed for political effect and with no qualifications for his position. But little can be expected of such appointments, and but little is secured. A change in the system would work wonders, but even the system is not entirely to blame.

Like every other kind of construction work to be successfully built and maintained, earth roads depend upon several essential requirements. Two of these are the drainage question and the grade and alignment. Upon the way in which the surface water is handled may almost be said to depend the life of the road. If the drainage is badly or carelessly handled or allowed to go neglected, certainly it means the destruction of the road. So, too, in a large measure is the life of the road dependent upon the proper alignment and grade. Oftentimes a change up the hill or down the hill, a curve installed here and eliminated out there, or a new channel for the

neighboring small creek will mean salvation for the road.

Too much cannot be said of the importance of drainage. It is important in connection with any character of road construction, but taking into consideration the soft surface of an earth road, the drainage becomes doubly important. It is not a simple question easily handled, but requires much study, dividing itself naturally into several divisions. The road must be so well crowned and so evenly and well built that the rainwater will never stand in pools. Then again, there is the sub-drainage. Often the road will be underlaid with springs. Or it may be built in wet, marshy ground. The side ditches along the road are likewise important. They not only care for the water shed by the crowned road, but they intercept and carry off the water coming to the roadway from the adjacent country. The cross culverts make another interesting study, and much time and thought is necessary to obtain culverts sufficiently large and of such a character as will carry the water away. The crown of the road answers the same purpose as the roof of the house. The purpose of the crown is to shed the water from the road. If the crown is too flat, water will collect in slight depressions and continuous traffic increases the depressions to a good-sized hole. If the crown were sufficient to drain the water falling to the side ditches, the road surface would be kept comparatively dry. The amount of crown depends upon a number of things, such as width of roadway, the grade of the road and the character of the soil of which the road is built. Only sufficient crown should be given to the road to do what is required of it. Too much crown will force wagons to one side of the road and off the road surface proper.

Sub-drainage is not always required, but in seepy or marshy ground it is a necessity. Water can be gotten off the road easily, but ground water is sometimes a serious problem. A road cannot be maintained in wet ground. Sometimes blind rock drains will carry off the water. At other times it may be necessary to underlay the road with longitudinal or transverse tile drains. Each problem must be worked out on its own merits.

The side ditches, if properly built, will many times drain a damp roadbed. These ditches, too, care for the water shed from the surface of the road by the crown. They play an exceedingly important part, and must be looked after at all times. Even when sub-drainage is not needed, good side ditches are always required.

Bridges and cross culverts must be supplied ever so

\*A paper read before the Arkansas Good Roads and Drainage Association.

often. These are required to distribute the water to natural channels so that the side ditches do not carry too much water. Cross culverts require a great deal of care and attention. If they are too high, they run the expense needlessly high. If they are too small, the heavy rains not only take out the culverts, but road as well. Too many times boxes and culverts are put into a road without any care or thought, only to be washed out with the next freshet because of insufficient capacity or careless location. The writer recently had several hundred feet of a road, because of improper culvert location, washed entirely away. This road was built up to a height of some five or six feet, and culvert openings were made too small when the road was constructed. During a very heavy freshet the strain became too great and part of the bank gave way. This opening allowed a current and volume of water to go through the roadway, which took everything before it. A small bridge would have cost but a few dollars and saved several thousand.

The other very important question is grade and alignment. While the road may be built and traversed, and become very useful on a poor alignment and with a steep grade, the question of cost in hauling over the road is an item to which serious attention should be given. The cost of future maintenance also enters largely into consideration, and drainage bears intimate relation to grade and alignment. It is far more difficult to maintain ditches on a steep grade or crooked road than on a flat straight road. However, it is principally upon the cost of hauling that the grade has its important bearing. If a farmer is eight miles from market and has just one hill, say 1000 feet in length on a 10 per cent. grade, he loads his wagon so that he can pull the 10 per cent. grade. If the rest of the grades are no steeper than 2 or 4 per cent, it makes no difference. He must load his wagon for the one steep grade. In the course of a year the loss to the farmer because of this grade becomes enormous. The old adage "A chain is no stronger than its weakest link" was never applied more aptly than in this connection. A team is capable of hauling over every road only what can be hauled up the steepest grades.

The grades upon every road should be worked out with relation to the traffic in proportion to the construction cost. In other words, the amount of traffic in a large measure limits the allowable amount of expenditure for grade reductions. In the mountain sections railroads often cover many miles to reach points in a straight line only a few miles apart, but the grades allowable require the additional mileage.

In theory the best road is the short road, but in practice this is not true. It is far better and will mean a great saving in transportation costs to detour so as to avoid the heavy grades, even at the expense of distance. On a 5 per cent. grade it is estimated that a horse will pull about one-half as much as on a level road. On a 10 per cent. grade it will pull not over one-fourth as much. The necessity for grade reduction becomes very apparent in the immense saving in transportation.

Again, while oftentimes a deviation from the straight line will cut out heavy grades, there are other causes for alignment changes. Bridges are not only expensive, but they are troublesome in times of freshets. The fewer bridges one has in his road the better. Oftentimes by changing the course of the road a creek crossing may be avoided and the road gotten up and away from the creek bed.

A successfully kept earth road means a constantly maintained earth road. There are so many things to affect the road that each one must be looked after. The little soaking showers soften the surface and the vehicles rut the road. The washing rains follow every rut, collecting more water as the little stream flows down the roadway until it leaps over the side and washes a "gulley" in the berm to the ditches. A rock or a stick in the surface makes a hard spot. Wagon wheels drop off to the softer earth and the little hole soon becomes a big one. This goes on until the road becomes a series of holes and high spots. Then during the dry summer weather the soil is pulverized. Dust particles are mixed with pulverized vegetation and animal excreta until there is no cohesion of the particles. The dusty material has no life. It is worthless, becoming soft with the slightest rainfall and unfit for the road in wet weather.

During the dry weather it is so soft and light as to become a terrible menace. Maintenance is not a difficult proposition, but it is a case of "eternal vigilance" and constant, intelligent care.

More harm is done earth roads because of untelligent work in an endeavor to maintain them than can be estimated. The constantly recurring drainage question

is ever at the front. The great Richelieu once said that three cardinal traits were necessary to a successful career: "the first, audacity; the second, audacity, and the third, audacity." So with earth roads, the three cardinal requirements are drainage, more drainage and again drainage.

To properly maintain your road, the culverts must be kept clean, the cross ditches clear and the side ditches always open and free from obstacles to impede the rapid flow of water. Willows, weeds and underbrush must be kept down and the bottom of the ditches clean. Side ditches play such an important part in road maintenance that almost the first requirement is to keep them open and free from obstructions. Upon these ditches depend very largely the drainage of your road. The surface cannot be kept dry unless the ditches are of sufficient depth to rapidly take off the surface water, and unless the ditches are free from obstacles the free flow of the surface water is impeded and oftentimes so stopped and dammed as to force it back into the road.

Especially is this condition dangerous on the steeper grades. Surface water on grades flows so rapidly that once it gets out of the ditches into the roadway, even the little rains make great gullies. The hillside roads, too, are very difficult to maintain, because the surface water has a tendency to follow the ruts made by horses and vehicles rather than run into the side ditches. They demand a great deal of attention and care.

Closely related to the side-ditch problem is that of the crown and surface of the road. If the road is kept well crowned and well surfaced, the water will easily flow into the ditches. Too often, however, when a road begins to flatten out a grader is put into service and the weeds and grassy soil from the berm is scraped into the middle of the road. Continued traffic over the road has already pulverized the top soil and mixed it with vegetable matter and animal excreta until it has become absolutely dead and unfit for road material. In the dry weather it is a powder blown by every little breeze. In wet weather it is a mushy material with no bottom and splattering everywhere. The weeds and grass roots only make matters worse.

Instead of dragging anything to the middle of the road on top of this material, it should first be dragged off the road. It is better for fertilizer than for road material. Then clean, fresh material, fit for road surface and free from weeds and a surplus of grass roots should be dragged to the roadbed with your grader and this material properly surfaced. The new material should be good fresh soil and left surfaced, free from lumps, holes or clots of earth.

In keeping an earth road in shape the road drag is indispensable. Every rain will soften the road surface, and traffic will necessarily cut it up. Traffic cannot be kept off the roads, and means must be devised to care for them so that traffic will injure them the least possible amount. The road drag is a real necessity. It surfaces over the road following the rain, presenting a smooth, compact roadway to traffic. Continued intelligent use of the drag will keep the earth road in good condition at all times. Do not get the idea, though, that the drag will build the roads. It will not. It is a boon in maintenance matters, but only after the road has been properly built.

Summing up, then, the essentials in proper maintenance, the writer will say that if your drainage ditches are kept open and clean; your roadway well graded up and properly crowned after rains and when ruts appear your road carefully dragged, the problem of successful earth road maintenance has been solved. The first principle that must be learned, however, is that it requires eternal vigilance. One cannot neglect his earth road for any great length of time. It must be looked after and cared for all the time. It requires systematic effort and constant care. It may not be much work this week, and but little next week, but the little work needed must be done just when needed or the road cannot be maintained to its highest degree of usefulness. A little care just when needed saves a great deal of work and expense a little later. Successful earth road maintenance, we might say, is constant watchfulness and a little intelligent but simple work as often as is necessary.

The writer has not gone into the detailed methods of either construction or maintenance. The time limit for this paper is too short for an extended discussion of this kind.

An effort has been made, however, to put clearly before you, for your consideration, the few things essential in construction and maintenance, and it is the hope of the writer that these few remarks will result in much good.

It is our desire, in conclusion, to impress upon you, and impress strongly, just these three important points:

The first is that earth roads are really roads, are necessary roads, and that the earth-road problem must be dealt with by highway engineers and others.

Secondly, earth roads can be well constructed, and that there is wisdom in constructing them intelligently and with care.

The last point, intelligent and constant maintenance is the secret of good earth roads.

## ROYSTER COMPANY TO REBUILD.

### A Question Raised as to Baltimore's Interest in Nearby Industries.

Mr. F. B. Dancy, manager at Baltimore of the northern division of the F. S. Royster Company, writing to the MANUFACTURERS RECORD regarding plans for the rebuilding of the plant at Fairfield, Anne Arundel county, across the river from Baltimore, damaged by fire last Friday, says:

"We will at once rebuild the burnt portion of our plant. We would like to do this on an improved and more extensive scale than before, but if we are to be denied the help of the city in future cases of fire, as we were denied it in this case, we certainly are not encouraged to put any more money than possible on our Baltimore plant. The most discouraging and disappointing thing of the whole bad business to us was the refusal of the city fire department to help us, in response to our urgent appeal made to chief of the same within 15 minutes after the incipient flame was located by our watchman. It seems to us that there is here represented a very broad and important question, involving the interests of Baltimore city. If she means to announce to the world that, because an industrial plant—whether of choice or necessity—is located on the other side of the harbor and not within the limits of the city, she will stand idly by and see them burn up without giving aid, then there is scant encouragement, as we look at it, for outside capital to become interested in investing in industrial enterprises in Baltimore's harbor. It looks to us like the most narrow-minded policy possible. We trust that it will not prove to be a settled one."

[We believe that the discussion growing out of the failure of the Baltimore city fireboat to go to the scene of the fire will result in the inauguration of the policy by the city government that will provide for just such emergencies as that of last Friday. The fireboat is primarily for the protection of the water front of the actual municipality, and, where there is only one in commission, there might be a risk in withdrawing it from its normal field to a point beyond the city limits, and, as in the case of the fire of Friday, in a county across the river. On the other hand, the plea of Mr. Dancy is an eminently reasonable one, especially if it be backed by the fact that the city fireboats have done service beyond the city limits. The question resolves itself into one, not of confining the operations of the fireboat to the municipal territory where the taxes are paid for its support, but of risking the possibility of loss by fire in that territory because of the absence of the fireboat. We believe that the city will do wisely in providing sufficient fireboat equipment to enable it to act effectively and promptly in such an emergency as that of the Royster plant without subjecting the water front of the city proper to danger. The F. S. Royster Guano Co. has extensive offices in Baltimore city, and is, therefore, to be regarded as a Baltimore institution, although its plant lies across the river. Its complaint is a reasonable one, and it ought to lead to such municipal action as will encourage industries to develop in all the territory really tributary to the city, although lying without its corporate limits.—Ed. MANUFACTURERS RECORD.]

The Parkersburg (W. Va.) Board of Commerce has elected T. E. Graham, president; H. H. Archer and Fergus C. O'Conner, vice-presidents, and C. P. Dudley, B. R. Blackford, F. Fowler, John Marshall, J. Mentor Caldwell, O. S. Hawkins, E. O. Bower, Jos. Murphy, Thomas Logan, Reese Blizard, Jos. Stern, J. W. Roberts, A. B. White, M. J. Rathbone, W. A. Hersch, W. H. Gerwig, J. R. H. Radeker, A. B. Smith, G. L. Watson, J. A. Luttrell, Dr. G. D. Jeffers, John Romine, P. D. Neal, F. C. O'Conner and H. H. Archer, directors. W. Scott Radeker is secretary.



# Florida: An Object Lesson in Development

[Editorial Correspondence Manufacturers Record.]

Daytona, Fla., January 17.

No one can intelligently study Florida and its wide resources for profitable employment, measure the value of its climate as an asset, and mingle with people from other sections who have come here to live or those who annually come to escape the rigors of Northern winds without being impressed with the fact that this State in itself is one of the nation's greatest assets.

Florida holds a peculiar relation to the country. It is a State so richly endowed with climatic advantages that as a winter resort it is indeed a national asset, the importance of which its own people and the country at large should fully understand. It cannot live unto itself. Unlike most of the States, it cannot be regarded by its own people merely from the viewpoint of an individual State, but it must be regarded in its broad relation to the people of the whole country.

Tens of thousands of people from all parts of this country and many from Canada annually seek this State for its balmy winter climate. Anyone who is fairly familiar with the men who have developed the railroad and industrial and financial interests of the whole country may almost call the roll from the hotel registers and the cottages of the foremost leaders from New England, from the Middle States, from the West, and even from Canada. No other State in the Union in the infancy of its development, as is Florida, will have the possibility of developing so cosmopolitan a citizenship. Great leaders in finance, in manufacturing enterprises, in railroad management, professional men of the highest standing are all gathering here every winter, and many of them maintain splendid winter homes in this State. A large proportion are unlike the general run of tourists who rush into and out of a country merely to say they have been there. Many who are coming to Florida are coming to spend the winter with the idea of permanency, either as hotel guests year after year or as owners or renters of winter homes. It is an interesting fact that some people who come to Florida engage their hotel accommodations a year ahead. And a large proportion of the furnished cottages that are for rent in various parts of the State are taken a season ahead. From one point on the West Coast of the State a letter was lately received stating that 500 furnished cottages could be rented if they were available.

The country at large knows Florida as a winter resort. The thousands who come during the winter season, crowding every train from the North and the West, and even waiting weeks to get Pullman accommodations, visit the State for its delightful winter air. Unless, however, the people who live in Florida, who have come from every section of the Union, are so fond of the truth as to be exceedingly economical in its use, the real charm of Florida must be its summer climate. In every gathering of people who have come from elsewhere and made permanent homes here there is a unanimity of statement in regard to Florida's summer climate that simply cannot be doubted by anyone who has faith in the truthfulness of mankind. A young civil engineer, a relative, who spent last summer at work on the East Coast Railroad between Miami and Key West, insists that it was the most delightful summer, so far as weather is concerned, that he had ever enjoyed, though he is a lover of the bracing cold of Northern New England. Some dear old friends, living on the West Coast for the last 30 years, amply able to spend their summers back in their native land of New England if they desire, say that if they have to leave Florida for a trip they always prefer to do so in winter in order to be able to remain in the State during the summer, claiming that nowhere in New England can they find such delightfully cool and invigorating nights. At a social meeting with some 15 or 20 members of the Board of Trade of Jacksonville some time ago, nearly every man in the crowd had come from other States. A few were from the South. Some were from the far West, some from New England, and one or two from Canada. Every one of them told the same story about summer climate, and even the Canadians voiced with all appearances of truth that never in Canada had they so enjoyed the summer weather as in Florida.

The people living on the East Coast will tell you that their summer climate is due to the splendid breezes which constantly sweep from the ocean. The people

on the West Coast will tell you that the prevailing winds from the south and southwest are cooled by the waters of the Gulf of Mexico, and that, therefore, their nights are always refreshing in the summer time. The people in the middle of the State tell you that they get the benefit of the winds that sweep across the Atlantic and pass over the State and likewise the benefit of the winds that come across the Gulf and into the interior of the State.

These people, of course, all admit without question that the summer season is longer, and that the days are warm and indeed sometimes hot. Nevertheless, it is true that the thermometer rarely rises as high in Florida as in the North and West, and never as high as the extremes of temperature in the other sections. It is upon the freedom from sunstrokes in the day time and the conditions which produce sunstrokes and the cool and refreshing summer nights that particular stress is constantly laid.

Some time ago a banker friend, on his way from New York on a burning July day, met on the train an old acquaintance who years before had moved to Florida, and who carried with him an overcoat, despite the fact that the temperature was ranging dangerously near to the 100-degree mark. The old-time friend was asked why in the world he was carrying an overcoat at such a season. He said that he would not need it until he reached his Florida home, but that as he had to ride three miles from the station to his place in the country, an overcoat would be needed, as it nearly always was needed in summer evenings.

It has not been my privilege to test Florida's climate in the summer time. I cannot, therefore, speak except from the testimony of others. In vain, however, have I for some years sought to find a Floridian, man, woman or child, who did not claim, if he has ever lived in the North or West, that the summer climate of this State is infinitely preferable to that of his former home. If human evidence counts for anything, the statement must be accepted, for the testimony is overwhelming, with nothing on the other side.

There is another phase of Florida's climate which should be more generally understood. Many people imagine that the moment you cross the State line you have suddenly entered the tropics, and that cold weather is never known. Some people imagine that they can come to the State supplied only with summer clothes. They rarely make that mistake, however, the second time. There are a good many days when, throughout a considerable part of Florida, the weather is cold. Sometimes the thermometer drops to the freezing point. That, however, is very rare. But a temperature of 40 to 50 or 55 degrees is more common, and warm clothes and a well-heated house are necessary for perfect comfort. This is not a disadvantage, rather it is an advantage to the State. For an unbroken range of summer temperature through 12 months of the year would, to 99 out of 100, become irksome and undesirable. The disagreeable days, however, or the days when warm fires are needed seem very scarce in this State. Unlike conditions in California, where the winter is the rainy season, here the winter is the dry season. Day after day the sun shines with exceeding brilliance. The air may be warm, but generally it is crisp and invigorating. At the very time of the year when people want dry weather, the winter, Florida furnishes it. The rainy season, so-called, is in the summer and early fall.

During mid-winter the trucking fields are at their height of activity. Strawberries are being shipped out of Florida while zero weather prevails through much of the North and West. Right now, in the middle of January, the roses, the gorgeous poinsettias and hibiscuses give brilliant color wherever one turns. Some places in Florida pay more attention to flowers than do others. Unfortunately, not every point in the State devotes as much attention to making Florida, in deed as it is in name, "The Land of Flowers," as it should do.

A State which, like this, draws its permanent settlers and its thousands of tourists from every part of our country and a good many from other lands, is under obligation to the whole country to regard itself as a trustee of these climatic and other advantages, using them for the highest benefit of the people whom it is so

persistently, by virtue of its attractions, calling to itself as permanent citizens or winter tourists.

Florida is pre-eminently the citrus-fruit center, so far as the quality of the fruit is concerned, of the world. Its oranges and grapefruit have no equal, though sometimes small and inferior fruit is shipped away or furnished to the guests of boarding-houses and hotels to the real disadvantage of the State.

Florida's strategic location, stretching 500 miles into the Atlantic Ocean and the Gulf, with rapidly developing ports whose foreign commerce is steadily increasing, will give it a very great advantage for expanding trade and commerce upon the opening of the Panam Canal.

Florida is the world's chief center of phosphate rock production, upon which the prosperity of the farmers of this country as well as other lands depends.

Florida is a great timber State, with vast lumbering and naval-stores operations.

Florida is the market garden of the country, producing millions of dollars' worth of early vegetables which go in great trainloads every day of the winter to the North and West.

Florida's development in all of these industries, except perchance in that of timber, is in its infancy. Its citrus-fruit industry can be greatly increased. Its trucking business will necessarily have to be expanded many fold as the population of the nation continues to grow. Its phosphate-rock business, by better methods of handling and by the utilization of the raw material in the State, will doubtless add far more to the wealth of the owners and to the State than it has yet done.

Florida's ports will grow even more rapidly in domestic and foreign trade than they have done in the past.

And yet, notwithstanding the fact that all of these things be true, Florida's greatest asset is its climate. Tropical luxuriance of plants and shrubbery which appeals mightily to everyone is on every hand. The capitalization of its climate, which is being done, will produce tangible wealth comparable to that made in the development of coal and iron in other States. Moreover, tens of thousands of people who have made their wealth elsewhere will seek Florida in ever-increasing number as a winter home. All over the State there are to be found beautiful winter homes of Northern and Western well-to-do men. They are developers, they are investors, they are the forerunners of permanent settlers who come in their trail, and they make possible the development of railroads and hotels and kindred interests. Of necessity, the number of people who have winter houses here will rapidly increase. The population of the whole country is growing tremendously. In 20 years the increase in the country's population will largely exceed the total population of the 16 Southern States. Thus a whole South in population, and far more than the South in accumulated wealth, will be added to the nation in the next 20 years, and a still larger population and a still greater wealth in the next 20. This all spells a larger population of permanent home-makers and winter tourists in Florida.

It is interesting to note that even now this State is growing in population twice as rapidly as the country. That in itself is significant. This very fact demands the study by the people of other parts of the South and a careful investigation on the part of the railroads of the South. Between 1900 and 1910 the population of the United States increased 21 per cent. In the same period the population of Florida increased 42.4 per cent.

In 1890 there were 2400 miles of railroad in the State. There are now nearly 6000 miles.

As late as 1900 the resources of the national banks of the State amounted to less than \$10,000,000; now they figure up about \$60,000,000.

In every line of development, industrial and agricultural, in city growth and country advance, similar development has been made. There is a reason for it, and the South, as a whole, can learn many lessons from the study of what Florida is doing and what it will do in the future.

In the first place, the railroads of this State have for a long time been, with few exceptions, more active and energetic in advertising Florida than have the railroads of any other part of the South, except the Southern Railway, which has been magnificently advertising the country tributary to its 8000 miles of line, and it is an interesting fact that the city growth and the industrial development in the territory tributary to the Southern Railway has shown just such an advance as that made by Florida. The backward States and the backward sections, to a large extent, are those which have not themselves been energetic and active and which have not been widely and persistently advertised by the railroads year after year. Spasmodic work for a year or

two and then discouragement because immediate results are not obtained has been the trouble with many roads and many sections.

For years the East Coast Line and the Seaboard Air Line, especially, have been most persistent and energetic in making known the advantages of Florida for the settler as well as for the tourist. The result is an amazing development along their territory. Other roads have done something, but not as persistently nor as broadly as these roads, and they have to that extent failed to utilize the splendid opportunities presented.

Florida, and, for that matter, the whole South, ought to be more widely advertised than California. Owners of the railroads entering this State ought to recognize that it can be made to more than duplicate the development of California. As yet it is very far behind California in that it cannot show such wonderful cities as San Francisco and Los Angeles and other places. These cities, especial Los Angeles and others in Southern California, have been made, not so much by natural advantages as by the magnificent daring of the people and the unequalled co-operation of the railroads. The Union Pacific spends more money in advertising its territory by two or three times as all the railroads of the central South, from Maryland to the Mississippi. This is largely due to the fact that the capitalists who have controlled Southern railroads have not yet, except in rare cases, waked up to the resources of their territory, and, therefore, they have limited the expenditures of their operating departments much below the amount that ought to be provided for development work.

Possibly the Clinchfield road is the best example in the country of what can be done in the development of a new region by creative work and broad publicity of the right kind. The Clinchfield, in proportion to mileage, has set a pace in the development of its territory which probably matches the best that has ever been done by any Pacific Coast road, and the results to the road and to its territory are little less than miraculous. If the railroads operating in Florida and in other parts of the South would match the Clinchfield's campaign, in proportion to mileage, they would find such an increase in business through the growth of the South in population and wealth that most of them would be compelled to double-track their whole lines.

Florida, however, with its increase in population twice as great in percentage as that of the country and its rapid growth in wealth, shows what has already been done by active and long continued railroad work, but the field for expansion is so vast that only the edges have been touched with the plow.

R. H. E.

### Zinc in Tennessee.

[Knoxville Sentinel.]

Another zinc industry, of practically the same magnitude as that now in operation at Mascot, is being projected within 600 feet of the big Mascot plant. A shaft has been sunk and drilling and estimates have been made, which assure engineers that 2,000,000 tons are in sight, as against 1,750,000 in prospect in the first shaft that is now being so successfully operated. It is probable that the new plant, over the second shaft now being sunk, will be erected and in full operation at an early date.

The prospective enlargement of the Mascot operations of the American Lead, Zinc & Smelting Co., together with the fact that Mascot zinc is bringing a premium of \$5 to \$7 per ton over concentrates of like grade from the famed Joplin district, is regarded as very significant. It is accepted as an indication of the superior value of East Tennessee zinc over that of the Missouri belt, and as a further evidence of the well-founded belief of many experts that the local zinc fields ultimately may rival those of Missouri, and perhaps of other sections.

The American Lead, Zinc & Smelting Co. began its operations in this section a little more than two years ago. It has quietly but consistently continued its investigations, until it was convinced of the value of the deposits and of the presence of zinc ores in paying quantities. The large expenditures at Mascot followed, and the zinc operations there are proving very successful. The progress of the work was logical and intelligent. Nothing was done in the nature of constructing a plant until the engineers and geologists were satisfied that much zinc was available, and the tonnage was definitely blocked out. Then the plant was built and it has been in operation about eight months. The mill is now treating in excess of 1000 tons of ore daily. Though it was designed for a maximum capacity of only 1000

tons, as high as 1150 tons have been handled in a single day.

The purity of the Mascot zinc ore has attracted attention to it, both from a chemical and milling standpoint. It is a sulphide, and is massive and crystalline in a limestone or dolomite gangue. It is free from lead, and there is but a trace of iron in it. Experts say these conditions make possible a very clean separation of the blende and the gangue, and a consequent high recovery of the metallic contents.

### Clinchfield Coal at Galveston.

[Galveston News.]

The Atlantic States Coal & Coke Co., a subsidiary of the \$64,000,000 Clinchfield Fuel Co., has established headquarters in Galveston.

After a study of the opportunities Galveston offers for the development of the coal and coke business with the coming of steel manufacture in Texas, and with the increased volume of shipping that will crowd the port of Galveston at the opening of the Panama Canal, the officials of the company settled upon the Oleander City as a logical point for entering the lists, and have leased offices in the American National Insurance Co. building.

"Our choice of Galveston as a coaling point is in recognition of the coming greatness of Galveston as a port and of Greater Galveston harbor as the center for big industrial growth, after a full consideration of the certainty of development resulting from the opening of the Panama Canal and from the fact that we can supply cargoes of coking coal for steel manufacturing, development, and obtain from these industries return cargoes of Texas iron ore for ships that otherwise would go back to the coal fields empty," said Wesley Merritt, representative of the Atlantic States Coal & Coke Co. in Galveston.

A 3000-ton cargo of coal for the new firm is due to reach Galveston about February 15.

The eventual plans of the company are to locate their coal-storage facilities and their loading apparatus at Port Bolivar. Here are to be concentrated the cargoes of coal that for the present will be shipped by steamer from Hampton Roads by way of Key West to Galveston. This Virginia coal that is for some time to come to constitute the shipments is a medium, volatile, high-carbon free-burning, non-sulphurous and almost smokeless sort that is comparatively new to the Southwestern market. The Clinchfield interests also control coal fields in West Virginia, Kentucky and Alabama, as well as in the Virginia coal-mining districts.

"In opening up this coal business, with headquarters in Galveston," he said, "we are really working out a general plan, all the various divisions of which are tending inevitably toward the manufacture of steel rails in Texas. President Ripley of the Santa Fe instructed me while I was industrial agent of the Santa Fe system to investigate this matter thoroughly, to employ the best mining engineers and experts procurable, and to co-operate with Colonel Featherstone and his associates in carrying on their plans.

"From that time to the present I have devoted most of my time in assistance of the working out of these plans. There is not a single feature which has not been carefully analyzed by from two to seven of the best engineers and experts in their several fields. The railroad connections from Ore City to Longview—the Port Bolivar Iron Ore Railway—have been built, and there is now a straight haul from the ore beds to tide-water on Galveston harbor at Port Bolivar.

"Ore docks have been built by the Santa Fe at Port Bolivar. Favorable transportation rates have been concluded with the consent of the Texas Railroad Commission. The first cargoes of ore have been delivered to Eastern mills, and that ore has been converted into steel. The engineers by test pits and personal examination long ago ascertained the quantity of this ore, but it remained for these cargoes to demonstrate that the ore, in actual fluxing, produces first-class steel.

"This has been done. It is a broad and comprehensive industrial enterprise, and has demanded patient and continuous effort. The results are in sight, and Texas is soon I believe, to begin to come into its own as an industrial center. The natural resources are practically all here. We are taking advantage of them.

"As to Galveston in the light of a coaling station, the interests I represent are backing their belief in the greatness of the port, attained after careful study of

the whole situation. I am working toward an economy in rates and in handling which will give to this port the lowest prices possible for first-class coal for the bunkers of the steamships that make Galveston their port of call.

"My plans are to work this business down by efficiency to a price low enough to warrant all ships leaving the port of Galveston to take their full bunker requirements here. My hope is to see Galveston the coaling port of the coming Panama Canal traffic."

### To Construct 25 Miles of Levee.

Contractors for levee and similar work will be interested in an announcement, received by the MANUFACTURERS RECORD from the Morgan Engineering Co. of Memphis, as follows:

"Sealed bids will be received by the directors of Garland levee district of Miller county, Texarkana, Ark., until February 5 for constructing approximately 25 miles of levee on the west bank of Red River. This work will be offered in three parts, composed of approximately 400,000, 375,000 and 310,000 cubic yards. A certified check for \$5000 must accompany each bid. Maps, profiles and specifications are on view at the offices of the engineering company at Memphis and of J. D. Williams, secretary of the district directors at Texarkana, or will be furnished by the engineering company."

### \$300,000 Chemical and Nodulizing Company.

The Carroll Chemical & Nodulizing Corporation of Pulaski, Va., has been chartered with \$300,000 capital stock to mine pyrites, manufacture sulphuric acid, etc. Its officers are as follows: President, A. Heckscher of New York; vice-president, Charles T. Stout of Portland, Conn.; secretary-treasurer, Charles H. George of East Orange, N. J.; director, John F. McKee of Pulaski.

### A \$70,000 Paper-Box Mill.

A mill with a daily capacity of 25 tons of paper boxes will be established at Richmond, Va., by the A. S. Kratz Company, of which A. S. Kratz is manager. The building will be of mill construction, 150 feet long by 125 feet wide, costing about \$20,000, and bids will be opened on February 15. The machinery will cost about \$50,000 and has been purchased.

### To Separate Iron from Furnace Slag.

M. B. Parker, mechanical engineer, Tallapoosa, Ga., writes to the MANUFACTURERS RECORD that he wants to correspond with manufacturers of equipment suitable for separating iron from blast-furnace slag, as he contemplates installing a plant of this character

### Building in Pensacola in 1913.

The building inspector of Pensacola reports that 168 permits were issued in that city during 1913, representing a cost of construction of \$276,641. These figures are for new construction only, and do not include alterations and repairs.

### To Manufacture Gelatine Paper.

For the purpose of manufacturing gelatine paper, the H. M. Conger Company has been incorporated by Frank T. Rawlings, H. M. Conger and W. Ballinger, all of Washington, D. C. This company has a capital stock of \$500,000.

The Board of Trade of Columbus, Ga., is circulating an attractively illustrated pamphlet setting forth the advantages and opportunities of the city and its environs and the facts of progress made there in many lines.

The Louisiana chapter of the American Institute of Architects has elected Charles A. Favrot, president; S. L. Labouisse, vice-president; N. C. Curtis, secretary, and Leon C. Weiss, treasurer.



## GOOD ROADS

### WEEK'S HIGHWAY RECORD.

#### Progress in Southern Road and Street Improvement.

[Further details of highway undertakings and bond issues mentioned below are given under the headings Construction Department and New Securities, published elsewhere in this issue.]

#### Bonds Voted.

Belton, Tex.—Bell county voted \$600,000 bonds for road construction.

Sulphur Springs, Tex.—City voted \$50,000 bonds for street improvements.

Temple, Tex.—Road District No. 4 of Bell county voted \$15,000 bonds to construct roads.

#### Bonds to Be Voted.

Denton, Tex.—Special Road District of Denton county votes February 21 on \$300,000 bonds to construct roads.

Elgin, Tex.—City votes February 17 on \$30,000 bonds to repair roads and bridges.

Falfurrias, Tex.—Brooks county votes February 14 on \$34,000 bonds for road construction.

Itasca, Tex.—Hill county votes February 21 on \$150,000 bonds for road construction.

Louisa, Va.—Louisa county votes February 3 on \$50,000 bonds to construct roads.

McKinney, Tex.—Celina Good Roads District No. 1, Collin county, votes February 21 on \$125,000 bonds for road construction.

San Marcos, Tex.—Hays county votes February 14 on \$50,000 bonds for road construction.

Waco, Tex.—City votes February 16 on \$65,000 bonds for street paving.

Waco, Tex.—McLennan county votes February 14 on \$1,075,000 bonds to construct roads.

Yokum, Tex.—City votes in February on \$100,000 bonds for street improvements.

#### Contracts Awarded.

Ginter Park, Va.—City awarded contract for street paving to cost \$75,000.

Houston, Tex.—City awarded \$20,000 contract for bitulithic paving.

Kosciusko, Miss.—County Commissioners awarded contract for about 10 miles of road work.

St. Louis, Mo.—City awarded \$30,000 contracts for street improvements.

#### Contracts to Be Awarded.

Baltimore, Md.—City opens bids January 28 for 87,500 square yards sheet asphalt, 20,300 square yards sheet asphalt, 10,300 square yards vitrified block and 3,400 yards vitrified block.

Houston, Tex.—City opens bids January 24 for paving to cost \$40,000.

Louisville, Ky.—City Engineer has submitted list of street reconstruction required, estimated to cost \$540,000.

New Iberia, La.—State opens bids February 2 to construct 4½-mile highway.

Port Tampa, Fla.—City will pave 6100x24 feet.

Spartanburg, S. C.—City has estimates for paving to cost \$86,000.

Star City, Ark.—Lincoln county receives bids until February 3 to construct 13-mile road.

St. Augustine, Fla.—St. John's county plans to invite bids for constructing 65 miles of highway.

Tulsa, Okla.—City plans paving 12 blocks.

#### Roads in Warren County, Kentucky.

Referring to modern highways in Warren county, Kentucky, M. H. Crump, road engineer of the county, Bowling Green, writes to the MANUFACTURERS RECORD as follows:

"Warren county has 1000 miles of highway, of which 250 are waterbound macadam, 150 gravel, 200 graded, 400 unimproved earth roads. A system is being worked out for maintenance by which every mile will be patrolled. On the 26th of January a proposition to vote \$300,000 will be submitted, without any additional taxation. The road fund will amount to \$40,000 per year. The \$300,000 will be for completing the permanent road system and carrying all main roads to the county

line, in addition to the railroad stations. Nine-foot roads requiring 1000 cubic yards of metal cost \$1500, of which the abutting property-holders pay \$500; hence for an appropriation of \$300,000 to taxpayers will secure \$400,000 worth of good roads. The 23.61 miles constructed since April, 1913, cost the taxpayers less than \$10,000. The people along the roads quarried the rock and hauled it to and from the crusher."

#### Roads for Galveston County, Texas.

Road improvements planned in Texas include those of the Galveston County Commissioners, Galveston. These commissioners will soon call for bids for the improvement of about 50 miles of roads, an expenditure of approximately \$200,000. The surfacing will be mud-shell spread to 8 inches deep and 12 feet wide. All bridges and culverts under a 40-foot span, most of them under this provision, will be of reinforced concrete. The smaller culverts will be iron pipe with concrete head walls. Bridges of more than 40-foot span will be of creosoted lumber. In addition, roads will be improved at Bolivar on Galveston Island, and at Hitchcock, Alcoa, Arcadia and Alta Loma. For the work on the Bolivar Peninsula it is planned to expend about \$30,000 in grading and shelling a portion of the road from Bolivar to High Island. The cost of the grading will be about \$500 per mile. About \$20,000 will be expended on the roads in the lower island section.

#### Experimental Highways in the South.

A bulletin just issued at Washington reports that more than 480,000 square yards of roads were constructed, mainly in the South, during the past fiscal year under the supervision of the United States Department of Agriculture. This work is in Arkansas, Florida, Georgia, Kentucky, Maryland, Mississippi, Nebraska, North Carolina, South Dakota, Tennessee, Texas, Virginia, Wisconsin and District of Columbia. The classes of construction were as follows: Brick, concrete, oil-cement concrete, bituminous concrete, bituminous-surfaced concrete, bituminous macadam, surface treatment, macadam, asphalt slag, oil asphalt gravel, oil gravel, oil coralline, gravel macadam, gravel, slag, sand-clay, sand-gumbo, burnt clay, shell and earth. The cost was \$139,841.89.

#### Extensive Improvements at Houston.

Important and extensive improvements in street and sidewalk paving have been in progress at Houston, Tex., during the past year. Since last April the city has constructed 56 blocks of pavement, has 68 blocks under construction, has 52 blocks ready for contractors to begin, and has recommended 160 blocks for 1914 construction, this entire work aggregating about 20 miles. From March 1 to January 1 Houston appropriated about \$310,000 for permanent street improvements, and has about \$757,000 available for appropriation for this year.

#### A \$1,075,000 Road Bond Election.

The McLennan County Commissioners, Waco, Tex., have ordered an election for February 14 to vote on issuing \$1,075,000 bonds for the construction of roads. This is an opportunity for the people of that county to register their views on this important question of modern highways, as an affirmative vote for such a large amount for this purpose would indicate their sentiments in no uncertain manner. Reports from Waco are to the effect that the proposition is favorably considered by the citizens of McLennan county.

#### Voted \$600,000 Bonds for Roads.

The determination of the people of Texas to continue the construction of modern highways in that State is emphasized in dispatches stating that Bell county has voted \$600,000 bonds to construct roads. As soon as the bond issue has been approved by the State officials the Bell County Commissioners will arrange to offer the bonds for sale and then plan the road construction. The Bell County Commissioners at Belton, Tex., are in charge.

## RAILROADS

[A complete record of all new railroad building in the South will be found in the Construction Department.]

#### JACKSONVILLE UNION STATION.

#### Construction of New Terminal to Begin This Year and Be Done Next Year.

The Jacksonville Terminal Co., as the result of several hearings before the Florida Railroad Commission and of the order of that body just issued, will erect a new union station at Jacksonville, Fla., and work upon it must begin by July 15 of this year and be completed within the following year. The building will be located on what is known as the Myrtle avenue site, and it will take the place of the present union station, which has long been considered inadequate for such a city. The railroad companies interested are Atlantic Coast Line, Seaboard Air Line, Florida East Coast, Georgia Southern & Florida, and Southern.

Under the order of the commissioners the new station must have its platforms so arranged that no passenger shall be required to cross any track to enter or leave a train. It is further prescribed that the waiting-room for white passengers shall have not less than 11,800 square feet of floor space, the waiting-room for colored passengers not less than 5024 feet, while the ticket lobby is to have not less than 4160 feet. Adjoining each waiting-room there will be a restroom for women and a smoking-room for men, and the toilet-rooms shall be arranged so that entrance thereto shall be either through a restroom or a smoking-room, as the case may be with regard to women or men. Specifications are also made as to the dimensions of all these rooms, which will be ample and commodious. The concourse or approach to the train platforms must have not less than 19,800 square feet of floor space. There must be at least half as many train gates as there are train tracks. The floor plan filed by Morton Riddle, chairman of the board of control of the Terminal Company, on December 15 is approved, and the station is to be built in accordance therewith. The yard plan filed November 17 is also approved, and will be fulfilled accordingly. The architect's plans and any other plans for construction must be submitted to the commissioners by May 15.

Several meetings were necessary to attain an agreement as to the new union station, and, in addition to the Jacksonville Terminal Co., there were represented the City Council, the Real Estate Exchange, the Board of Trade, the Duval County Commissioners and the people of Jacksonville. Suggestions that the present union station be enlarged and improved were, after consideration, rejected and the efforts of everyone concerned were directed toward designing a new station, satisfactory plans for which have at last been made and approved. J. C. Blanton is manager for the Terminal Company.

#### \$6,000,000 TO BE EXPENDED.

#### Stone & Webster to Build Sundry Extensions and Do Other Work in Dallas.

The Dallas Consolidated Electric Street Railway Co. of Dallas, Tex., proposes to spend more than \$6,000,000 for extensions and improvements, and M. M. Phinney, district manager for Stone & Webster of Boston, who control the property, says that work will begin immediately upon a satisfactory settlement of franchise requirements. This announcement was elicited by a letter addressed to him by J. C. Duke, chairman of the executive committee of the Greater Dallas Association, who said many citizens thought that (before voting on proposed city charter amendments relating to public service corporations) they should have a statement of what the railway company proposed to do.

Among the work to be done are the following extensions: To Oakland Cemetery; to southeast of the Fair Grounds; to southwest of the Fair Grounds; to east of the Fair Grounds; to north of Ross avenue and east of Peak street; to Dallas University and north and west of Preston road; to City Hospital and territory adjacent; a cross-town line for better communication between North and South Dallas; to serve central part of Oak-street loop; to territory south of and parallel

with Jefferson street in Oak Cliff; also other extensions to be agreed upon with the city and citizens.

There will be constructed a double-tracked viaduct across the Trinity River bottom lands to Oak Cliff, this going over all steam railroad tracks, thus avoiding grade crossings; adequate terminal facilities for the Oak Cliff service; double track on Bryan street; extensions of car barns and shops, and the interurban terminal building heretofore reported. New cars and other equipment will be purchased, and lastly, the projected interurban railway from Dallas to Terrell, Tex., will be built.

All this work, together with what is incidental thereto and including the completion of the underground system of electric wiring in the business district of the city, besides improvements already in progress, will reach the total named.

### Pensacola & Missouri Valley.

[Special Correspondence Manufacturers Record.]

Pascagoula, Miss., January 19.

The directors of the lately incorporated "Panama Line," "Pensacola & Missouri Valley Railroad," met at their offices in the People's Bank of Pascagoula January 16 and elected the following officers: President, Walter G. Seaver, late of Chester, Pa., and now of Pascagoula, Miss.; vice-president and general manager, Geo. B. Chapman, he being the present superintendent of the Pascagoula & Northern Railroad; second vice-president, McVea Young, who is also one of the directors of the Merchants and Marine Bank of Pascagoula; third vice-president, Chas. E. Chidsey; secretary, Calvin G. Scott, editor and proprietor of the Pascagoula *Chronicle*; assistant secretary, Dr. Jos. A. Tabor, all of Pascagoula; J. J. Paquette of New Orleans, La., treasurer; W. G. Preston of Philadelphia, Pa., assistant treasurer; general auditor, W. G. Preston of Philadelphia; general counsel, Samuel S. Watson, No. 10 Wall street, New York; general attorneys, Hudson & McKay, Vicksburg, Miss.; solicitor, H. B. Everett, Pascagoula; superintendent of motive power and equipment, J. E. Cameron; superintendent of construction, W. S. Cartter; purchasing agent, R. C. Fraser, all of New York; traffic manager, A. B. Kearsey, Pascagoula, and general agent port of Pascagoula, Sam Seaton, Jr.

Among other business the board approved and ordered a trust deed to be executed and payable to the United States Mortgage & Trust Co., securing the issue of first-mortgage bonds to the amount of \$40,000 per mile, or a total of \$60,000,000. The first section of road to be built is from Pascagoula to the Black Warrior coal fields in Alabama. The Panama Line has a contract with the Pascagoula Northern for the purchase of that line, which will be consummated in a few weeks. The route to the Black Warrior coal fields will be an extension of the P. & N. R. R.

The directors also authorized the construction of docks at Pascagoula on the land that it has secured for terminals near the mouth of the Pascagoula River. The president was also authorized to buy motive power and equipment for construction purposes.

CHAS. E. CHIDSEY.

### New Equipment, Etc.

Kanawha & Michigan Railway has placed an order for 1000 cars with the Ralston Steel Car Co., Columbus, O.

Fort Worth Belt Railroad has ordered a switching locomotive from the American Locomotive Co., New York.

Maryland Electric Railways Co. has been authorized to issue \$153,000 of 6 per cent. 10-year bonds for purchase of rolling stock.

Chesapeake & Ohio Railway is reported in the market for 10 Mikado-type locomotives.

Texas, Oklahoma & Eastern Railroad has ordered two freight locomotives from the American Locomotive Co.

Southern Railway has placed a rail order with the Tennessee Coal, Iron & Railroad Co., Ensley, Ala. It is said that the company requirements are 25,000 tons, and that about half will go to the plant mentioned and the rest to the Maryland Steel Co., Sparrows Point, Md.

Seaboard Air Line is expected to order 10,000 tons of rail each from the Ensley and the Sparrows Point mills.

St. Louis Southwestern Railway, according to a report from Waco, Tex., has ordered nine motor cars for service between Waco and Corsicana.

Santa Fe is reported to have ordered 500 box cars and 300 automobile cars from the American Car & Foundry Co., St. Louis.

Chesapeake & Ohio Railway, says a steel market report, is negotiating for 3000 cars.

Buffalo Creek & Gauley Railroad is reported to have ordered 200 hopper coal cars from the Pressed Steel Car Co., Pittsburgh.

Illinois Central Railroad has ordered 100 express refrigerator cars from the American Car & Foundry Co.

Austin (Tex.) Street Railway, says a local report, has ordered four pay-as-you-enter cars.

Wabash Railroad is reported getting prices on 1000 hopper cars and 500 gondola cars.

Frisco system is expected to place another rail order at Birmingham.

### Atlantic Coast Line Control.

Announcement has been made by Chairman Henry Walters of the Atlantic Coast Line that the directors of the Atlantic Coast Line Co. of Connecticut have decided to recommend to the stockholders that the capital stock be reduced one-half by a distribution from the assets of the company to the stockholders; also that the reduction in value of the Connecticut company stock will amount to \$8,820,000, in exchange for which will be delivered to stockholders \$17,640,000 of stock of the Atlantic Coast Line Railroad Co. The necessary meeting of stockholders is to be held February 20 at Bridgeport, Conn. It is further stated that the directors will recommend that the remaining \$8,820,000 of Atlantic Coast Line of Connecticut stock be reduced as to par value from \$100 to \$50 per share.

These transactions will, it is said, effectually lodge control of the Atlantic Coast Line with individual stockholders, instead of with the Connecticut corporation, which was formed to be a holding company.

### Baltimore & Ohio's Half-Year.

The Baltimore & Ohio Railroad Co. has issued its statement for December, showing operating revenue for the month, \$7,909,925; increase as compared with the same month of 1912, \$393,172; net operating revenue after deducting total operating expenses, \$2,107,112; decrease, \$217,367.

For the first six months of the company's fiscal year (July to December, inclusive) the operating revenue was \$52,653,964; increase as compared with the corresponding period of last year, \$204,626; net operating revenue after deducting total operating expenses, \$14,586,781; decrease, \$1,437,448.

With reference to the large decrease it may be observed, as previously announced, that there was charged out, in addition to current expenses approximately \$1,200,000 on account of flood damage sustained in the preceding fiscal year.

### Minneapolis & St. Louis.

Newman Erb, president of the Minneapolis & St. Louis Railroad, states that the company has not only arranged to pay off \$500,000 of its maturing notes and to provide for the remaining \$2,500,000 by the sale of two-year 6 per cent. notes to Speyer & Co., but that arrangements had also been made to reduce by \$1,000,000 its floating debt through the sale of treasury bonds. "The right to exchange maturing notes for the new notes," continued Mr. Erb, "will be offered to the present holders on attractive terms. The new issue will be secured by \$5,500,000 of the company's 5 per cent. extension and refunding mortgage bonds. The new financing reduces the debts of the company by \$1,500,000, leaving the floating debt approximately \$600,000."

### Monongahela Valley Traction.

The Monongahela Valley Traction Co. has issued its statement for December, 1913, and also for the year ended December 31. For December the figures are gross earnings, \$87,790; net earnings, \$53,524. This is an increase of over \$16,000 in gross and of nearly \$7000 in net. The net surplus for the month is \$27,350, an increase of more than \$5000, all comparisons being made with December a year ago.

For the year the gross earnings were \$960,261, in-

crease more than \$112,000; net earnings \$613,549, increase over \$97,000—comparisons being made with 1912. Net surplus for the year was \$315,501, as compared with \$255,592 for 1912.

### Norfolk Southern Extension.

The Norfolk Southern Railroad is pushing construction on its terminal at Charlotte, N. C. It is located at 6th and College streets, and there are half a dozen tracks already for handling both freight and passenger trains. The freight station is being rapidly erected. It is of brick, with floors of concrete. Regular freight and passenger schedules have been established. Although the Charlotte extension has been in use but little more than a month, an officer of the road is reported saying that expectations have been exceeded as to the amount of traffic handled.

### Virginia Railway & Power.

The Virginia Railway & Power Co. reports for the first six months of its current fiscal year gross earnings of \$2,619,118, increase as compared with the corresponding period of last year \$175,108; net earnings, \$1,305,962; total income \$1,353,088, increase \$72,624; surplus after taxes, interest, etc., \$550,271, increase \$11,599. Gross earnings for December were \$450,487, an increase of \$32,670, and net earnings were \$233,829, increase \$12,335; surplus after taxes, interest, etc., was \$105,280, increase \$347.23.

### Not After the Mobile Road.

A report from Mobile says that several directors of the Chicago, Burlington & Quincy Railroad Co. have denied the recent report circulated there that the Burlington was endeavoring to obtain control of the New Orleans, Mobile & Chicago Railway, adding to the denial that it was the policy of the company not to acquire any line south of the Ohio or east of the Mississippi River.

### Approval of Merger.

A report from Richmond, Va., says that the State Corporation Commission has approved the merger (previously described) of the Citizens' Railway, Light & Power Co. of Newport News, the Hampton Roads Traction Co. and the Newport News & Old Point Railway & Electric Co. under the name of the Newport News & Hampton Railway, Gas & Electric Co., capital \$2,500,000.

### Railroad Notes.

President J. W. Oglesby of the South Georgia Railway Co. announces the appointment of C. T. Tillman as purchasing agent at Quitman, Ga., and of M. K. Northam as industrial agent and assistant purchasing agent, with office in the National Bank Building, Chicago, Ill.

M. H. Gold, according to a report from Jacksonville, Fla., has been appointed division engineer of the Seaboard Air Line on the Alabama division, with headquarters at Americus, Ga. He is now assistant engineer at Jacksonville, but will take up his new work on January 20.

Louis S. Posner of New York and Alexander New of Kansas City have been appointed permanent receivers for the Missouri, Oklahoma & Gulf Railroad, succeeding William Kenefick, the president of the line, who had been temporary receiver. Mr. Posner, it is said, represents the bondholders and Mr. New the company's interest. He is general counsel for the road.

### A \$500,000 Stove Company

The Louis Warner Stove Co. of Shreveport, La., has been incorporated with a capital stock of \$500,000 and the following officers: Louis Warner, president-treasurer; B. A. Kobler, vice-president, and R. Latzke, secretary.



## TEXTILES

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the MANUFACTURERS RECORD. We shall be glad to have such matters at all times, and also to have any general discussion relating to cotton matters.

### Russell Manufacturing Co.

Regarding its recently completed improvements, the Russell Manufacturing Co., Alexander City, Ala., writes to the MANUFACTURERS RECORD as follows:

"Cost, \$150,000; addition to mill building, 115x145 feet, with ell 50x54 feet; new 50,000-gallon steel tank in tower; mill sprinkled throughout; totally electrified, using 40 electric motors, aggregating 500 horse-power. Added 6000 spindles and accompanying equipment, making total spindles now 11,000 and 40 knitting machines and 35 sewing machines. Bleach. Product, ladies' underwear and high-grade underwear yarns."

### The Cotton Movement.

In his report for January 16 Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that the amount of cotton brought into sight during 138 days of the present season was 10,718,719 bales, an increase over the same period last year of 306,660 bales. The exports were 5,772,960 bales, a decrease of 76,242 bales. The takings were, by Northern spinners, 1,493,879 bales, a decrease of 143,794 bales; by Southern spinners, 1,863,609 bales, an increase of 338,712 bales.

### To Double Knitting Capacity.

The Anniston (Ala.) Knitting Mills Co. plans to erect an additional mill, and will probably construct a two-story building containing 20,000 square feet of floor space. It proposes to double its present capacity, which is 400 dozen pairs of hosiery daily. At present the plant is operating 65 knitting machines, 60 ribbers, 25 loopers, etc.

### O. K. Knitting Mills.

The O. K. Knitting Mills of New Orleans, recently mentioned, has organized with \$25,000 capital stock and the following officers: President, N. Orsher; secretary-treasurer, S. Kronengold; manager, A. Radlauer; all of New York. This company has obtained space at New Orleans and ordered 25 knitters, etc., for manufacturing sweaters.

### Will Add 6000 Spindles.

The Brown Manufacturing Co., Concord, N. C., will add 6000 spindles in present buildings. This company is now operating 9112 ring spindles, 296 twister spindles, 200 broad looms, 290 narrow looms, etc., on the production of outings, gingham and chambrays.

### Textile Notes.

The Union Cotton Mills, Maiden, N. C., will add lap-press and has awarded the contract.

The Mayfield (Ky.) Woolen Mills will install considerable new machinery in branch mill at Paducah.

H. G. Alexander, Forest City, N. C., is reported as planning the organization of a company to build a cotton mill.

Geo. Duffy of the Duffy Silk Co., Buffalo, N. Y., is reported as contemplating the location of a branch silk mill at Raleigh, N. C.

The French Broad Manufacturing Co., Asheville, N. C., has ordered eight Jacquard looms and contemplates installing 52 additional.

The Board of Trade, Jacksonville, Fla., is negotiating with Tennessee manufacturers relative to locating a cotton mill at Jacksonville.

The Lynchburg (Va.) Cotton Mill Co. has appropriated a considerable amount of capital for the purchase of new machinery that will soon be needed.

The Hermitage Cotton Mills, Camden, S. C., will install 200 additional looms, and the contract for this additional weaving machinery has been awarded.

Marshall Field & Co., executive offices Chicago, advise that they contemplate building a central power plant at their Spray (N. C.) mills, the question being now under consideration. A recent unauthorized report stated the cost as \$150,000.

A. E. Young of Cedartown, Ga.; C. W. Bateson of Brooklyn, N. Y., and associates are interested in a plan to utilize the Josephine and Wahneta mill properties at Cedartown for the installation of a cotton-spinning equipment. Probably 15,000 spindles and accompanying machinery will be considered.

## LUMBER

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

### 125,000 Feet of Lumber Daily.

A 10-hour capacity of 125,000 feet of long-leaf yellow pine lumber has been decided upon for the plant which the Jordan River Lumber Co. will build to replace its mill recently burned at Kiln, Miss. The contractor, architect and construction engineer in charge is the Filer & Stowell Company of Milwaukee, and the new plant may be briefly summarized as follows: Buildings of ordinary mill construction; main building 250 feet long by 60 feet wide; two band saws, eight-foot horizontal resaw, lath mill, etc.; turbine generator set, alternating current, of about 250 kilowatts, three-phase, this turbine to be driven from exhaust of mill engines mixed with live steam. The set will operate the planing mill and light the entire plant.

### Daily Capacity, 12,000 Heads.

By February 1 Schuler & Moon, Jesup, Ga., will have in operation their plant for manufacturing pine heading and slack cooperage. The daily capacity will be 12,000 heads, and the firm has 10,000 acres of timber to cut.

### To Rebuild Big Lumber Mill.

The Tellico River Lumber Co., Tellico Plains, Tenn., will rebuild its mill recently destroyed by fire, the new plant to have a daily capacity of 150,000 feet of lumber.

### A Florida Timber Enterprise.

The Florida Pine & Cypress Corporation, capitalized at \$200,000, has been chartered by F. A., C. W. and E. Woodward of Mt. Vernon, N. Y.

## MINING

### Additional Development of Alabama Marble.

The Alabama Marble Co., Gantts Quarry, Ala., is developing its quarry in two-tunnel form to provide working space deeper into sounder stone, this development using a portion of the company's proposed \$150,000 additional capital. This property has been under development for some years, and the marble has been widely marketed for building and other construction purposes.

### To Mine Georgia Iron Ore.

For the purpose of mining iron ore at Estelle, Ga., the Estelle Iron Co. has been incorporated by C. E. Chamberlain, W. A. Malone, Harris K. Vance and Franklin Harris, all of Chattanooga, Tenn.

## MECHANICAL

Illustrations and descriptions having news value pertaining to developments in machinery, mechanical devices and inventions will be considered for use in this department.

### To Manufacture Auto Tires.

In the development of an extensive plant for the manufacture of a high-grade non-skid type of automobile tires, the Dreadnaught Tire & Rubber Co., Munsey Building, Baltimore, has purchased the seven buildings formerly occupied by the Williams Sanitary Works at Orangeville, in the suburbs of Baltimore, and has remodeled the plant to meet its requirements. Four acres of ground are included in the site, permitting additional buildings as they may be required.

The company has installed special machinery for weaving cotton and silk fabrics, together with other machinery for treating the rubber from the crude state to the finished product. The company expects to be delivering its entire line of tires and inner tubes by February 1.

The non-skid feature is obtained by the patent Dunbar vacuum tread surface developed by Wilmer Dunbar of Greensburg, Pa., president of the East Palestine Rubber Co., and general manager of the Dreadnaught Tire & Rubber Co. The tire surface is so molded that "vacuum cups" are formed to prevent skidding and at the same time a continuous road tread is produced by longitudinal elevations through the vacuum cups, making a smooth-running and durable tire surface.

The superintendent of the works is A. S. Mauk, an experienced tire and rubber goods maker from Akron, O., and later from the East Palestine Rubber Co. of Greensburg, Pa. Some of the labor-saving devices installed in the new plant are the inventions and developments of General Manager Dunbar and Superintendent Mauk.

The principal installations consist of special rubber-working machinery built by the Birmingham Iron Foundry, Derby, Conn.; Hamilton Corliss engine of 250 horse-power by the Hooven-Owens-Rentschler Company, Hamilton, O.; Westinghouse Electric 250-kilowatt generator and motors made by the Westinghouse Electric & Manufacturing Co., East Pittsburgh, Pa.; Crocker & Wheeler motors made by the Crocker-Wheeler Company, Ampere, N. J., and Equitable Building, Baltimore; boilers made by the Novelty Steam Boiler Works, Baltimore; compressed-air equipment by Westinghouse Airbrake Co., Pittsburgh; hydraulic pumps made by Henry R. Worthington, 115 Broadway, New York, furnished together with other machine-shop equipment by Wickes Bros., Jersey City, N. J. The extensive lines of molds used are supplied by the Adamson Machine Co., Akron, O.; the weaving machinery by Cleveland Machine Works, Worcester, Mass., and Crompton & Knowles Loom Works, Worcester. Power for operating the plant will be supplied both by its own power plant and by the Consolidated Gas, Electric Light & Power Co., Baltimore.

The capacity of the plant will be 500 tires and 500 inner tubes per day. Provision is made for adding units as the demand may require, so that the capacity may be readily doubled or trebled.

The enormous demand for tires which has brought about such vast tire-making establishments in other sections lends interest to the establishment of this important industry in Baltimore. The company anticipates an immediate demand for its entire output, and arrangements are being made with leading jobbers and dealers to handle the tires in an effective way. The company has been organized with an authorized capital stock of \$1,000,000, and its stockholders and directors include some of the leading business men of the city. The South is annually paying many millions of dollars to other sections for automobiles, motor trucks and tires, and every movement looking to the establishment in this city or in other Southern cities of plants to produce at home automobiles and tires is of more than local interest.

The directors of the company are Wilmer Dunbar, Walter E. Hill, C. P. Triplett, Albert W. Adt, Walter B. Swindell, H. E. Whitelock and A. B. Whitelock, all of Baltimore; G. Herbert Rice of Catonsville, Md.; R. C. Lupton of Wilmington, Del., and Clarence F. Normant of Washington, D. C.

# Construction Department

## IN ORDER TO FOLLOW UP

Properly the Construction Department items, please bear in mind the following statements:

### EXPLANATORY

The MANUFACTURERS RECORD seeks to verify the items reported in its Construction Department by full investigation. It is often impossible to do this before the item must be printed or else lose its value as news, and in some items it is found advisable to make statements as "reported" or "rumored," and not as positive information. If our readers will note these points they will see the necessity of the discrimination. We are always glad to have our attention called to errors that may occur.

### HOW TO ADDRESS

The name of one or more incorporators of a newly incorporated enterprise should always be written on letter addressed to the official headquarters or to the town of the parties sought, as may be shown in the item. Sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. By following these general directions the postoffice will generally be enabled to deliver your mail promptly, although it is inevitable that some failure by the postal authorities to deliver mail to new concerns will occur, as our reports are often published before new companies are known and before they have any established office for the receipt of mail.

### WRITE PERSONAL LETTERS

In communicating with individuals and firms reported in these columns a letter written specifically about the matter reported will receive better and quicker attention than a circular. In most instances a return postal card or addressed and stamped envelope should be enclosed with letter.

In correspondence relating to information published in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

### DAILY BULLETIN

The Daily Bulletin of the Manufacturers Record is published every business day in order to give the earliest possible news about new industrial, commercial, building, railroad and financial enterprises organized in the South and Southwest. It is invaluable to manufacturers, contractors, engineers and all others who want to get in touch at the earliest moment with new undertakings, or the enlargement of established enterprises. The subscription price is \$25 per year.

All advertising contracts in the Manufacturers Record for three months or longer include a subscription to the Daily Bulletin for the contract period, as well as a subscription to the Manufacturers Record.

### BRIDGES, CULVERTS, VIADUCTS

Ark., Sylamore.—Francis Keifer interested in plan to construct bridge across Sylamore Creek.

Ark., Tuckerman.—Jackson county will construct \$5000 250-ft. bridge across Village Creek; plans and construction supervision by H. R. Carter, State Highway Engr., Little Rock.

D. C., Washington.—Dist. Comms. are having plans prepared for bridge across Rock Creek at Pennsylvania Ave.; reinforced concrete; multiple arch rib, one span 300 ft.; D. E. McComb, Engr. of Bridges; date of opening bids not set; plans and specifications at Dist. Bldg.

Fla., St. Augustine.—St. Johns County Comms. and city will expend \$18,900 to erect bridge across San Sebastian River at foot of King St.; reinforced concrete deck on reinforced concrete piles; H. G. Ferring Engineering Co., Consult. Engr., Jacksonville. (Contract lately noted let to Seth Perkins, St. Augustine.)

Ga., Americus.—Sumter County Comms., Americus, and Crisp County Comms., Cordele, considering construction steel bridge across Flint River; cost \$15,000 to \$18,000.

Ga., Americus.—Sumter County Comms. Roads and Revenues have plans and specifications for constructing 2 bridges recently mentioned; reinforced concrete construction; 4 spans of 30 ft. each, with 2 spans of 29 ft. each and 2 spans of 30 ft. each; bids until Feb. 16; estimated cost \$8000. (See Machinery Wanted.)

Ga., Augusta.—Richmond county will build \$1500 reinforced concrete bridge. J. M. Haynie, Clerk County Comms., states 4 or 5 bridges will be erected, at cost of \$5000 to \$7500, by convict labor; plans being prepared.

Ga., Baxley.—Company is being organized to construct bridge across Altamaha River at Piney Bluff; W. H. Tillman, Chrmn., County Comms., R. F. D. No. 1, Surrency, Ga.

La., Mandeville.—Town Council let contract Ernest Faure to rebuild 3 bridges across Bayou Castaing.

La., New Orleans.—City will erect Strauss trunnion bascule bridge over entrance to Southern Yacht Club pen on line of New Basin Canal shell road; bids at office of Dept. of Public Finances until Feb. 26. (See Machinery Wanted.)

Mo., Joplin.—City Council let contract

O'Hagan & Lake, Kansas City, at \$96,133 to construct viaduct at Broadway to be built jointly by city and Joplin Union Depot Co. of Harrison, Ark.; reinforced concrete; 879 ft. long; 572 ft. of approaches with retaining walls; total length, 1451 ft.; to include 6-ft. sidewalk and 23-ft. roadway paved with wooden blocks; also single-track street car; total width, 42 ft. 3 in.; Brooks & Jacoby, Engrs., 512 Shukert Bldg., Kansas City; C. B. Anderson City Engr. (Lately noted.)

Mo., Springfield.—Greene County Court ordered J. R. McAfee, County Engr., to prepare plans for 2 bridges on Fair Grove Rd.; estimated cost, \$6000; receive bids within next month; W. B. Cloud, Clerk.

Tenn., Chattanooga.—Hamilton county voted \$500,000 bonds to erect bridge across river at Chattanooga; Tennessee River Bridge Com., Theo. F. King, Chrmn., invites engineers to submit designs and estimates Feb. 18; design to be adopted by War Dept., U. S.; lately noted. (See Machinery Wanted.)

Tenn., Blountville.—Jas. E. Miller, Secy. Road Com., Sullivan county, states lately noted steel bridge will be at Hemlock Station, on C., C. & O.; C. M. Dulaney, Blountville, Engr. in charge; committee on site and cost has been appointed; cost about \$16,000. (See Machinery Wanted.)

Tex., Christoval.—Tom Green County Comms., San Angelo, Tex., engaged B. F. Davis, Fort Worth, Tex., to prepare plans and specifications for constructing bridge costing about \$6000 across South Concho River.

Tex., Fort Worth.—Tarrant County Commissioners let contract W. H. Martin at \$4455 to build Samuels Ave. bridge approaches; 20,000-yd. fill.

Tex., Fort Worth.—City let contract El Paso Bridge & Iron Co., El Paso, at \$15,945 to construct Nine-Mile Bridge; length, 1305 ft.

Tex., Freeport.—Brazoria County Comms.' Court (lately noted considering the proposition) will join with Houston & Brazos Valley Ry., Felix Jackson, V.-P., Freeport, to build proposed bridge across Brazos River, connecting Freeport and Velasco; cost at least \$120,000; J. W. Munson, County Judge, Angleton, Tex.

Tex., Port Sullivan.—Robertson and Milam counties retained J. C. Field Engineering Co., 105 Field Bldg., Denison, Tex., to design

and supervise construction of 550-ft. highway bridge across Brazos River; bids at Cameron, Tex., Feb. 11. (See Machinery Wanted.)

Tex., Houston.—Harris County Comms. let contract to A. G. Tarkaberry at \$3065 to construct bridge over Spring Creek on West Montgomery Rd., and invites bids until Feb. 2 to construct bridge over Langhams Bayou, on Houston and Katy Rd.

Tex., San Antonio.—Bexar County Comms. will expend \$15,000 to construct bridge 12 mi. east of San Antonio; 4 25-ft. girder spans and 2 60-ft. arch spans; reinforced concrete construction; Terrell Bartlett, Consult. Engr., San Antonio; contract lately noted let to John O'Kelley, Losoya Hotel, San Antonio.

Tex., Waco.—City votes Feb. 16 on \$50,000 bonds for bridge construction; J. H. Mackey, Mayor.

### CANNING AND PACKING PLANTS

Md., Baltimore.—Consolidated Beef & Provision Co., 194 S. Exeter St., inctpd.; capital \$40,000; Wolf Salganik, Prest. and Mgr.; Louis P. Salganik, V.-P.; David B. Landy, Secy.-Treas.; will erect 3-story concrete building on 48x75-ft. lot; install sausage machinery, tracking, refrigerating equipment, boilers, engines, etc., for handling of beef and manufacture of beef products; open building and machinery bids Feb. 15. (Lately noted, under Miscellaneous Factories, as acquiring plant of W. Salganik & Sons and to erect addition. See Machinery Wanted.)

Tenn., Gray (not a P. O.).—Gray Canning Co., capital \$6000, inctpd. by S. H. Gray, C. E. Dove, Sidney Martin and others, all of Johnson City, Tenn.; will establish canery; daily capacity, 8000 cans.

Tex., Brenham.—Price Booker Mfg. Co., Houston, Tex., contemplates erecting few salting sheds only. (Lately noted to establish pickle factory.)

Tex., Eagle Lake.—Eagle Lake Fruit & Canning Co., capital stock \$2500, inctpd. by O. G. Kolberg, A. E. Anderson and L. Penfold; will can figs, vegetables, etc.

### CLAYWORKING PLANTS

Okla., Henryetta.—Bricks.—Henryetta Pressed Brick Co., capital \$5000, inctpd. by C. P. Gotwals, 213 Barnes Bldg., Muskogee; S. J. Allen and Jennie Allen of Wainwright, Okla.; erecting 40x70-ft. machinery-house; also kilns; no contract; stockholders supervising work.

Tex., Brownwood.—Bricks.—Hal Haldeman and others purchased Brownwood Brick Works and will increase capacity.

### COAL MINES AND COKE OVENS

Ky., Barbourville.—Tye-Wheeler Coal Co., capital \$10,000, inctpd. by Geo. W. Tye, Myrtle Tye and R. R. Wheeler.

Ky., Harlan County.—Henry Nelson, Winchester, Ky., will develop coal mines in Harlan county; install power and other equipment.

Ky., Nebo.—C. H. Murphey, Madisonville, Ky., states he has sold 5500 acres of coal rights to Eastern capitalists, who are purchasing other coal tracts and developed property; further information not available at present. (Lately noted.)

Ky., Pikeville.—American Fuel Co., capital \$10,000, inctpd. by C. P. Chatfield, W. K. Steele, W. W. Reynolds and F. B. Preston.

Mo., Connellsville.—Connellsville Coal & Mining Co., capital stock \$15,000, inctpd. by C. W. Evans, Marion C. Miller and S. F. Shoop.

Tenn., Nashville.—Andrews Coal Co., capital stock \$10,000, inctpd. by M. L. Andrews, W. W. Andrews, R. M. Burns and others.

W. Va., Bramwell.—Modock Coal Mining Co., capital stock \$100,000, inctpd. by W. H. Thomas, Edward Cooper, W. J. Pritchard and others.

W. Va., Logan.—Lorain Coal & Dock Co., Cleveland, O., is reported to have purchased West Whelching Coal & Dock Co.'s mining properties and build coal tipples.

### CONCRETE AND CEMENT PLANTS

Ark., Little Rock.—Concrete Caskets.—Goodrich Patent Concrete Co. organized to build plant for manufacturing patent concrete caskets; site at foot of Lincoln Ave.; Geo. Goodrich, Prest., McRae, Ark.; G. B. Hobbs, V.-P. and Gen. Mgr.

### COTTON COMPRESSES AND GINS

Ark., Little Rock.—Thos. J. Rench, Mulberry Grove, Ill., is reported as planning to build cotton gin and flour mill.

Ga., Stillmore.—Stillmore Electric Light Co., W. L. Clarke, proprietor, contemplates erecting cotton gin. (See Electric Plants.)

Okla., Shawnee.—Universal Fiber Gin, capital \$25,000, inctpd. by B. D. Jones, W. S. Curtis and L. D. McKinney.

Okla., Tishomingo.—Farmers' Co-Operative Gin & Oil Co., capital \$25,000, inctpd. by H. A. Brown, J. L. Castille and W. R. McDonald.

Tex., Clinton.—Nelms-Kehoe Dock Co., Thos. Kehoe, Prest., Houston, Tex., will expend \$40,000 to erect compress, cotton sheds and platform, on water frontage; let contract to erect compress. (Lately noted inctpd., \$50,000 capital stock, etc.)

Tex., Otto.—Farmers' Gin Co. increased capital stock from \$7000 to \$15,000 and will increase capacity of gin.

### COTTONSEED-OIL MILLS

Ga., Atlanta.—Atlanta Cotton Oil Co. let contract to install 4-press mill; T. S. Kenan and W. T. McKay in charge of plant.

Okla., Tishomingo.—Farmers' Co-Operative Gin & Oil Co. inctpd. by H. A. Brown and others. (See Cotton Compresses and Gins.)

### DRAINAGE SYSTEMS

Ark., Newport.—Overcup Slough Drainage Dist. let contract to Moffatt Co., Des Moines, Iowa, at 7.5 cents per yd. for about 1,000,000 cu. yds. excavation; Morgan Engineering Co., Engr., 608 Goodwyn Institute Bldg., Memphis, Tenn. (Bids lately noted.)

Ark., Osceola.—St. Francis Valley Engineering Co. of Osceola completed surveys for canals and levees for Drainage Dist. No. 12 of Craighead county, comprising 12,000 acres; engineer's estimate calls for construction of 17.3 mi. canals, requiring 366,500 cu. yds. excavation, 1.8 mi. levee, containing 40,800 cu. yds. embankment, and 6 steel bridges; will invite bids in Feb.

Ark., Marion.—Willis E. Ayres, Engr., Memphis, Tenn., is making surveys for 150,000-acre drainage district in Crittenden county.

Ga., Monroe.—Jacks Creek Drainage Dist., Walton county, is proceeding with plans for previously-noted work; Atlantic Engineering Co., Lawrence Manning, Prest. and Mgr., 614 Germania Bank Bldg., Savannah, Ga., completed and filed report with Drainage Court; about 7½ mi. dredge channel and 5 mi. small lateral hand ditches; cost about \$23,000; reclaim 900 acres bottom lands.

Ga., Franklin and Stephens Counties.—Broad River Drainage Dist., Franklin and Stephens counties, is proceeding with plans for previously-noted drainage; Atlantic Engineering Co., Lawrence Manning, Prest. and Mgr., 614 Germania Bank Bldg., Savannah, Ga., advises has filed completed report, maps and plans with Drainage Court, Franklin county; plans include dredging 17½ mi. Broad River, about 7 mi. tributaries and 3 mi. small hand ditches; estimated cost, \$96,000; reclaim 3900 acres bottom lands.

La., Lake Charles.—Pomelo Plantation Co. will issue \$50,000 bonds for completing reclamation of 1100 acres undrained land on Calcasieu River, 15 mi. from Lake Charles.

La., Crowley.—Sixth Ward Drainage Dist. of Acadia Parish let contract G. B. Ziegler & Co., Jennings, for dredging; L. A. Williams, Secy. of Dist., is inviting bids to complete dredging of ditch (through city) not included in contract let.

North Carolina.—Irish Buffalo Creek Drainage Dist. established; having final survey made for about 15 mi. dredge ditch; reclaim about 3000 acres; Geo. R. Boyd, Engr., Savannah Bank & Trust Co. Bldg., Savannah, Ga., states bids will be asked about June 1.

N. C., Wilmington.—New Hanover county contemplates formation of New Hanover County Drainage Dist. No. 1 to drain about 2500 acres east of Wilmington, tract being about 1 mi. wide; J. L. Becton, Engr., completed preliminary surveys; Board of Viewers (Mr. Becton, J. T. Lowmire and J. K. Williams) submitted preliminary report.

S. C., Horry County.—Buck Creek Drainage Dist. No. 1 is proceeding with plans for previously-noted drainage; Atlantic Engineering Co., Lawrence Manning, Prest. and Mgr., 614 Germania Bank Bldg., Savannah,



Ga., completed and filed with County Clerk a report supplementary to report of F. G. Eason, U. S. Drainage Engr., Dist of South Carolina; plans include about 14 mi. dredge channels and 2 1/2 mi. small hand ditches; cost about \$73,000; drain about 17,500 acres.

### ELECTRIC PLANTS

Ala., Bay Minette.—City contemplates installation of street-lighting system; probably gasoline. Address F. E. Bartmess. (See Machinery Wanted.)

Ark., Arkadelphia.—Arkansas Power Co., H. C. Couch, Pres., 308 State National Bank Bldg., Little Rock, Ark., acquired plants of Arkadelphia Light Co. and Wilson Water & Electric Co.; lately noted. (See Ark., Camden.)

Ark., Camden.—Arkansas Power Co., H. C. Couch, Pres., 308 State National Bank Bldg., Little Rock, Ark. (lately noted as purchasing Camden and other plants), advises as follows: Acquired plants of Malvern Electric Co., Malvern; Arkadelphia Light Co., Arkadelphia; Wilson Water & Electric Co., Arkadelphia; Camden Light & Power Co., Camden; Standard Light & Ice Co., Magnolia; will make improvements at all these plants and probably connect some with transmission lines from central generating station; J. H. Meek, Fordyce, Ark., is Pres. of company; J. W. Lee, Malvern, Treas.; J. L. Longino, Little Rock, Secy. (See Machinery Wanted.)

Ark., Malvern.—Arkansas Power Co., H. C. Couch, Pres., 308 State National Bank Bldg., Little Rock, Ark., acquired plant of Malvern Electric Co. (See Ark., Camden.)

Ark., Magnolia.—Arkansas Power Co., H. C. Couch, Pres., 308 State National Bank Bldg., Little Rock, Ark., acquired plant of Standard Light & Ice Co. (See Ark., Little Rock.)

Ark., Prescott.—Electric Light Commrs., A. R. Taylor, Supt., contemplate purchasing 75 K. V. A. generator and automatic slide engine, direct connected.

Fla., Arlington Heights.—C. C. Tracey, 311 Masonic Temple, Jacksonville, and associates let contract for construction of electric-light plant and water-works.

Fla., Chipley.—Chipley Light & Power Co., E. H. Hale, Gen. Mgr., purchased additional generating set. (Lately noted.)

Ga., Stillmore.—Stillmore Electric Light Co., W. L. Clarke, proprietor, contemplates constructing 1 mi. distribution line and installing 30 H. P. oil engine; also building cotton gin, grist mill and planing mill.

Ga., Villa Rica.—Villa Rica Electric Light & Power Co., N. B. Powell, Gen. Mgr., will install lately-noted electrical equipment. (See Machinery Wanted.)

Ky., Rockcastle.—Mount Vernon Power Co., capital \$5000, inceptd. by L. W. Bethurum, E. S. Albright, C. D. Sutton and others.

Ky., Madisonville.—Madisonville & Nortonville Light, Power & Traction Co. will build power plant.

Ky., Vine Grove.—Citizens' Lighting Co., capital \$3000, inceptd. by W. E. Crutcher, W. D. Carter, W. T. McDonough, E. H. Cox and others.

Md., Hyattsville.—City plans issuing \$10,000 bonds previously voted to install electric-light plant. Address The Mayor.

Md., Williamsport.—City plans issuing bonds to construct electric-light system and water-works. Address The Mayor.

Miss., Aberdeen.—Electric Light and Water-Works Commrs. contemplate purchasing and installing 150 H. P. engine in spring; E. A. Stimson, Supt.

Miss., Greenwood.—Electric Light and Water Commrs. contemplate purchasing and installing 500 K. W. 3-phase 60-cycle 2400-volt (high-pressure) turbo-generator, with auxiliaries, switchboard, etc. R. Stott is manager.

Miss., Richton.—John MacDonald and others are interested in construction of proposed electric-light plant, water-works system and ice plant.

Miss., Ruleville.—Electric Light Com., O. S. Anderson, Supt., contemplates purchasing armature for 6 K. W. Wood generator, 2 transformers, 10 poles, 20 cross-arms and 3000 ft. No. 10 weatherproof wire.

Mo., Ray County.—P. J. Carolus, St. Joseph, is reported interested in proposition to build electric plant near Ray county coal mines.

Mo., Dixon.—W. L. Diffenderfer, Lebanon, Mo., is negotiating for franchise to supply Dixon with electric lighting. (Lately noted to have secured franchise at Richland, Mo.)

N. C., Madison.—City, W. C. Jones, Mayor, is interested in securing electric-light plant.

N. C., Roanoke Rapids.—Roanoke Rapids Power Co. has franchise for lighting; will construct electric plant.

N. C., Troutmans.—Town is reported as considering construction of electric-light and power plant. Address Town Clerk.

N. C., Wendell.—Town voted \$15,000 bonds to construct electric-light plant. Address Town Clerk. (Lately noted.)

N. C., Wendell.—Town voted \$15,000 bonds to construct electric-light and power plant; purchased site, including rock and cement dam and building on Little River; will transmit electricity 4 mi.; contract let to J. W. Smith Electric Co., Norfolk, Va., to install plant; cost \$15,000.

N. C., North Wilkesboro.—Town Commrs., W. A. Bullis, Clerk, contemplates installation of engine and boiler as auxiliary to water power for operating light plant. (See Machinery Wanted.)

S. C., Lake City.—Commrs. Public Works, Philip H. Arrowsmith, Atty., will install electric-light plant; bids opened Feb. 10. (See Machinery Wanted.)

S. C., St. George.—S. S. Ingman, Bay and Abercorn Sts., Savannah, Ga., has franchise to erect power plant to develop 60 H. P.; 15x30 ft.; brick or iron; also construct 2 mi. electric distribution system; is receiving bids; city lately noted as letting contract for machinery. (See Water-works and Machinery Wanted.)

Tenn., Pulaski.—City will issue \$10,000 bonds to complete electric-light plant and pay indebtedness. Address The Mayor.

Tex., Bowie.—Bowie Light & Power Co., W. C. Woodlief, Mgr., Box 1615 Dallas, Tex., states will construct plant; plans not ready for announcement. (Lately noted inceptd., capital stock \$50,000.)

Tex., Dallas.—Dallas Consolidated Electric Railway Co., M. M. Phinney, Dist. Mgr.,

Norfolk, Va.), F. B. Dancy, Mgr. Northern Division, advises let contract to D. J. Rose, Rocky Mount, N. C., to rebuild portion of plant recently burned—the mill storage department; erect 600x140-ft. mill construction building of improved fertilizer type; P. S. Gilchrist, Charlotte, N. C., Archt. and Construction Engr.; A. L. Griffin, Mgr. manufacturing Dept., Norfolk, now receiving machinery proposals; balance of plant intact.

### FLOUR, FEED AND MEAL MILLS

Ala., Birmingham.—Smith Bros. Milling Co., 2415 1st Ave., organized by A. E., N. C. and R. A. Smith; will invest \$50,000 to build plant with daily capacity 1500 to 2000 bushels cornmeal, 100 tons alfalfa mixed feed and 50 tons chicken feed; erect 4-story mill and a warehouse, latter containing 25,000 sq. ft. floor space.

Ark., Little Rock.—Thos. J. Rench, Mulberry Grove, Ill., is reported as planning to build flour mill and cotton gin.

Ga., Stillmore.—Stillmore Electric Light Co., W. L. Clarke, proprietor, contemplates constructing grist mill. (See Electric Plants.)

Ky., Butler.—N. C. Rouse and T. S. Yelton will establish feed mill.

Ky., Cerulean.—W. N. Stive will increase capacity of mill.

Ky., Owensboro.—Bransford Mills (C. W. Bransford and others) plan to build flour mill and grain elevator; install power and conveying equipment. (Lately noted inceptd. with \$50,000 capital.)

Ky., Scottsville.—M. B. Dixon will build corn mill.

Ky., Seabree.—M. M. Hancock will establish feed mill.

Ky., Greenhall.—W. H. Flanery will establish flour mill.

### PROPOSAL ADVERTISEMENTS

IN THIS ISSUE ARE

PUBLISHED ON PAGES 76 and 77

In order to secure best bids from leading engineers, contractors and investment houses, the proposal advertising columns of the Manufacturers Record are invaluable.

Rate 20 cents per line per issue.

When Proposal Advertisements cannot be sent by mail in time to secure insertion before date for opening bids, please wire advertisement copy by Night Letter.

Proposal Advertising must reach us not later than 9 A. M. Wednesday for publication in issue of that week.

plans expending more than \$6,000,000 for extensions, improvements, etc., to include double-track viaduct across Trinity River bottom to Oak Cliff, additional power station equipment, improvements and extensions to car shops and barns, interurban terminal building heretofore announced, completion of underground electric wiring, etc; Engrs., Stone & Webster Engineering Corp., 147 Milk St., Boston, Mass.

Tex., El Paso.—El Paso Electric Ry. Co., H. S. Potter, Gen. Supt., advises of contemplated installation of 4000 K. W. turbo-generator with condenser and switchboards; 2600 H. P. B. & W. boilers; additional cooling tower; 1000 K. W. railway motor generator; work supervised by Stone & Webster Engineering Corp., Trust Bldg., El Paso.

Va., Broadway.—Town, C. R. Whitmore, Clerk, defeated lately-noted bonds for electric-light plant.

Va., Winchester.—Northern Virginia Power Co. has given option on its properties to Percy M. Chandler, Philadelphia, Pa., and associates, about \$1,000,000 being reported involved; properties include electric plants at Millville, Berkeley Springs and Great Cacapon, W. Va., and substations at Winchester and Berryville, Va.; Charles Town, Martinsburg and other W. Va. cities.

### FERTILIZER FACTORIES

Fla., Jacksonville.—American Agricultural Chemical Co., capital stock \$25,000, inceptd. by Chas. B. Hobbs, Pres., Great River, N. Y.; C. Lansing Hays, V.-P. and Treas., 96 Sterling Pl., Brooklyn, N. Y.; Laurence Miller, Secy., 606 W. 111th St., New York.

Ga., Macon.—Fertilizer Brick Co. organized by Dr. M. M. Stapler and others to mfr. fertilizer brick.

Ga., Metter.—Metter Fertilizer Co., E. J. Register, Pres. and Mgr. (lately noted inceptd., capital stock \$15,000), advises is completing erection of building; purchased machinery; daily capacity, 150 tons.

Md., Baltimore.—F. S. Royster Guano Co., 1604 Munsey Bldg., Baltimore (home office,

Ky., Hopkinsville.—Acme Milling Co. will install cornmeal machinery.

Mo., Racine.—D. K. Buzzard contemplates construction of flour mill.

Mo., Springfield.—Missouri Feed Co. inceptd. with \$3000 capital stock.

Mo., St. Joseph.—Excello Feed Milling Co. increased capital stock from \$75,000 to \$100,000.

N. C., Wake Forest.—Mutual Milling Co., capital stock \$50,000, organized to mfr. flour, feed, etc.; operate by electricity from Wake Forest Power Co.

Okla., Stonewall.—H. G. Foster contemplates erection of flour mill and grain elevator.

Tenn., Rogana.—Greenwood Mill & Elevator Co. will rebuild flour mill and grain elevator lately burned at \$15,000 loss.

Tenn., Maryville.—Jos. Garland is reported to have purchased Atchley Roller Mill and to enlarge.

Tex., Fort Worth.—J. P. Scott (1000 Texas St.) and J. T. Woolery are reported as contemplating erection of 50-bbl. flour mill.

### FOUNDRY AND MACHINE PLANTS

Fla., Daytona.—Machine Shop.—H. E. Johnson will erect machine repair shop; brick or concrete construction.

Ga., Macon.—Bridges, etc.—National Culvert & Bridge Works, Terre Haute, Ind., is reported to establish plant.

Ky., Owensboro.—Flour-mill Machinery.—Anglo-American Mill Co. advises that lately-noted addition triples capacity; all contracts and subcontracts placed.

Ky., Morganfield.—Lock Gates.—Self-Lock Gate Co. is reported to install additional equipment. (Lately noted to have increased capital stock from \$12,000 to \$30,000.)

La., Shreveport.—Stoves.—Louis Warner Stove Co., capitalization \$500,000, chartered; Louis Warner, Pres.-Treas.; B. A. Kobler, V.-P.; R. Latzke, Secy.

Md., Baltimore.—Blacksmith Shops.—Arundel

Sand & Gravel Co., Pier 2 Pratt St., foot of Commerce St., purchased site at 241 S. Central Ave. on which to erect blacksmith shops, garage and stable.

Mo., Kansas City.—Machinery.—Thomas Utility Machine Co., capital \$50,000, inceptd. by J. R. Thomas, C. C. Palmer and A. L. James.

Okla., North Miami.—Machinery.—Coffee Bros. Machine Shop Co., Box 536, organized; M. D. Coffee, Pres.; J. W. Barnes, V.-P.; E. M. Coffee, Secy.-Treas.; contract shop; continue established plant. (Previously noted inceptd., \$25,000 capital stock.)

Tex., Coleman.—Machinery.—Coleman Machine Shops will occupy 1 story 397x115 ft. brick building, with glass front; building owner, R. H. Newsom estate; awarded contract to I. L. Bragg.

W. Va., Wheeling.—Castings.—Wheeling Mold & Foundry Co. holds meeting Jan. 29 to consider increasing authorized capital stock from \$750,000 to \$1,000,000.

### GAS AND OIL ENTERPRISES

Ala., Mobile.—Gas Plant.—Mobile Gas Co. plans improvements to include construction of gas plant and coke ovens.

Fla., De Land.—Gas Plant.—City plans issuing \$200,000 bonds for gas plant, sewerage, street improvements, etc. Address The Mayor.

Fla., St. Petersburg.—Gas Plant.—City engaged J. B. McCrary Co., Atlanta, Ga., to prepare plans for gas plant; will vote on bonds; C. D. Hammond, Commr. of Public Works. (Lately noted.)

Ga., Americus.—Gas Plant.—Americus Public Service Co., capital stock \$250, inceptd. by John T. Taylor, C. M. Council, Neon Buchanan, W. D. Bailey and Lester Williams.

Ky., Carlisle.—Gas Franchise.—City, S. C. Vaughn, Clerk, contemplates granting franchise for natural gas; subject will be considered at City Council meeting Feb. 2.

Okla., Ada.—Franda Oil & Gas Co., capital \$20,000, inceptd. by M. E. Jones, Geo. S. Frierson and S. M. Trobett.

Okla., Ada.—Conservative Oil Co., capital \$20,000, inceptd. by W. C. Duncan, G. M. Ramsey, R. C. Preston and C. A. Galbraith.

Okla., Ada.—Union Oil, Gas & Development Co., capital \$30,000, inceptd. by W. G. Winn, W. A. Guest and R. C. Guest.

Okla., Ardmore.—Thirty-second Oil & Gas Co., capital \$15,000, inceptd. by G. A. Ramsey, T. H. Dunn and F. J. Ramsey.

Okla., Bartlesville.—Bradley Oil & Gas Co., capital \$6000, inceptd. by R. S. Bradley and others.

Okla., Dewey.—Stokes Oil Co., capital \$5000, inceptd. by D. L. Stokes of Dewey, W. W. Hampton and D. C. Hampton of Bartlesville, Okla.

Okla., Garvin.—Garvin Oil Co., capital \$30,000, inceptd. by D. L. Clark of Garvin, Harry C. Weeks, Arlington, Tex., and W. T. Hoblitt, Cookeville, Tex.

Okla., Muskogee.—Celeste Oil & Gas Co., capital \$8000, inceptd. by Mollie Rashofsky and C. R. Everett.

Okla., Muskogee.—Muskogee Oil & Gas Co., capital \$10,000, inceptd. by W. P. Candler and B. B. Rice of Muskogee and W. L. Ramsey of Farmersville, Tex.

Okla., Oklahoma City.—Perry Oil & Gas Co., capital stock \$31,000, inceptd. by W. C. Perry and J. O. Mattison of Oklahoma City and E. C. Nichols of Tecumseh, Okla.

Okla., Oklahoma City.—Schrinner Oil & Gas Co., capital stock \$9000, inceptd. by J. M. Schrinner of Ryan, Okla.; J. M. Watson and J. W. Burns of Oklahoma City.

Okla., Oklahoma City.—Cimarron Oil & Gas Co., Box 33 (lately noted inceptd., capital stock \$100,000), states will soon commence drilling; need casing, etc. (See Machinery Wanted.)

Okla., Oklahoma City.—Oil Pipe Line.—Magnolia Pipe Line Co., Corsicana, Tex., organized; Pres. and Gen. Mgr., D. C. Stewart of Corsicana; V.-P. and Secy., Tom Cowden, Oklahoma City; will construct pipe line from Texas border to western portion Carter county, Okla.; connect at border with 8-in. pipe line of Magnolia Petroleum Co., which has line from Electra oil field in Wichita county, Tex., southeast through Corsicana and Beaumont, Tex., where company has refineries. (Lately noted.)

Okla., Oklahoma City.—Oil Refinery.—Magnolia Petroleum Co., Corsicana, Tex., is reported as contemplating construction oil refinery.

Okla., Okmulgee.—Milburn Oil Co., capital \$75,000, inceptd. by F. W. Branigan and J. Belford of Okmulgee and J. A. MacArthur, Burlington, Ia.



Okl., Oklahoma City.—Little Four Oil Co., capital \$5000, inceptd. by Chas. Parks and Geo. D. Marshall of Oklahoma City and H. A. Waelehl, St. Louis, Mo.

Okl., Ponca.—Gasoline.—Bodock Gasoline Co. (lately noted inceptd., capital \$50,000, by Geo. L. Miller and others) advises proposes to mfr. gasoline from casing-head gas and to utilize the dry gas for fuel; need gas pumps. (See Machinery Wanted.)

Okl., Tulsa.—Dividend Oil Co., capital \$25,000, inceptd. by D. T. Kneidler, R. C. Cahill and W. L. Jones.

Okl., Tulsa.—Hagar Oil & Gas Co., capital \$19,000, inceptd. by E. F. Hannon, John S. Garbie and W. V. Biddison.

Okl., Tulsa.—Idalyda Oil & Gas Co., capital \$10,000, inceptd. by W. V. Harner and N. J. Gubser of Tulsa and S. B. Miles of Falls City, Neb.

Okl., Tulsa.—Lo Roy Oil Co., capital \$10,000, inceptd. by C. Hayden, M. E. Adkins, A. F. Hennigh and Wm. A. Crockett.

Okl., Vian.—Nigger Creek Oil & Gas Co., Gordon White, Secy. (lately noted inceptd., \$15,000 capital), states is ready to correspond with contractors and asks prices on drilling equipment. (See Machinery Wanted.)

Tenn., Knoxville.—Cumberland Oil & Gas Co., capital stock \$300,000, inceptd. by C. H. Alexander, O. H. Chandler, F. E. Hays, C. S. Cunningham and others.

Tex., Corpus Christi.—White Point Oil & Gas Co., capital stock \$20,000, inceptd. by G. M. Kenedy, J. C. Walker and L. R. Clarkson.

Tex., Houston.—Scott Labor Oil Co., capital stock \$2500, inceptd. by O. P. Hairgrove, Joe Jargano and F. J. DeMeritt.

Tex., Goose Creek.—Pet Oil Co., capital stock \$6000, inceptd. by F. M. Blair, C. J. Davis and C. F. Williams.

Tex., Wichita Falls.—American Oil & Gas Co., capital stock \$33,000, inceptd. by C. W. Bean, Frank Kell and W. A. Reid.

W. Va., Jane Lew.—Jessie Run Oil & Gas Co., capital stock \$25,000, inceptd. by A. B. Post and Clay C. Post of Jane Lew, L. W. Bennett, Weston, and others.

W. Va., Morgantown.—Silverhill Oil Co., capital \$50,000, inceptd. by Edward G. Donley and Albert Schuman, Morgantown; E. H. Hutchinson, Harmony, Pa., and others.

W. Va., Parkersburg.—West Virginia-Oil & Gas Co., capital \$100,000, inceptd. by J. N. Mahoney and J. W. Dailey, Parkersburg, and J. P. Ridge, Marietta, O.

W. Va., Webb.—Webb Oil & Gas Co., capital stock \$10,000, inceptd. by John A. Sheppard of Huntington, W. Va.; Wells Goodykoontz, Harry Scherr and others of Williamson, W. Va.

## ICE AND COLD-STORAGE PLANTS

Ala., Bessemer.—Tennessee Coal, Iron & R. Co. is reported as planning to construct ice factory to supply needs at all its plants.

Ark., Magnolia.—Arkansas Power Co., H. C. Couch, Pres., 308 State National Bank Bldg., Little Rock, Ark., acquired plant of Standard Light & Ice Co. (See Electric Plants, Ark., Little Rock.)

Fla., Chipley.—Chipley Light & Power Co., E. H. Hale, Gen. Mgr., will erect ice plant; corrugated iron; construction by owner; install 10-ton ice and refrigerating machine; bids opened Jan. 15 and contract let in few days. (Lately noted.)

Ga., Eastman.—Wm. E. Davidson will install 12-ton ice machine; equipment ordered.

Miss., Richton.—John MacDonald and others are interested in proposed construction of ice plant, etc. (See Electric Plants.)

N. C., Madison.—City, W. C. Jones, Mayor, is interested in securing ice plant.

Tenn., Bristol.—Twin City Coal & Ice Co. reorganized with \$50,000 capital stock; will build ice plant and ice-cream factory estimated to cost \$20,000.

Tenn., Winchester.—J. M. Overall, C. C. Henderson and others will build ice factory and cold-storage plant.

Tex., McAllen.—McAllen Creamery Co. will increase capital stock to install refrigerating plant.

## LAND DEVELOPMENTS

Ala., Birmingham.—Alabama Central Development Co., 701 American Trust Bldg., will develop 7300 acres 25 mi. from Birmingham, as Brandywine Townsite; divide into 5, 10, 20, 40, 80 and 160-acre tracts for farming; 100 business lots, 1900 town lots 50x140 ft.; promote building of hotel, bank building, dwellings, etc.; cost of improvements \$70,000; also develop 4000 acres about 25 mi. from Birmingham for farming; financed by American Finance & Bond Co. (Lately noted.)

Ala., Birmingham.—Ochard Sales Co., 1701 American Trust Bldg. (lately noted inceptd.), is sales agent for Howard Orchards Corp. of Chattanooga, Tenn., commercial apple orchards in Northeast Georgia.

Fla., Miami.—Florida Engineering & Development Co. organized with Chas. E. Greening, Pres.; L. D. Llewellyn, V.-P., and Geo. N. Mauer, Secy.-Treas.; plans developing bay front property to include boulevard from 1st St. to Mirimar.

Ala., Mobile.—Mobile Nursery Co., capitalization \$20,000, inceptd. for general agriculture, and especially growing Satsuma oranges; J. B. Dortch, Pres.; F. R. Murray, V.-P.; H. P. Crocker, Secy.-Treas.

Ark., Casa.—Rose Creek Development Co., capital \$10,000, inceptd. by J. E. Pope, N. A. Gray, A. J. Gray and others.

Fla., Miami.—Ward D. Foster and E. M. Sanchez purchased land for suburban development; reported purchase price \$40,000.

Ky., Paducah.—Sanitola Springs Co., capital \$100,000, inceptd. by W. V. Eaton, J. D. Robertson, Anthony List and others.

La., New Orleans.—Oaklawn Co., capital \$50,000, inceptd. by Jos. Birg, E. V. Weems, W. F. Thomson and others.

La., New Orleans.—Interstate Land Co., Jos. L. Rhodes, Pres., 302 Canal-Louisiana Bank Bldg., purchased 150 building lots on State St.; include construction of 1 mi. sidewalk, 1 mi. cement curb and ½ mi. paved street; latter improvements consist of 3 blocks of paving; character not determined; probably cement base with tarvia for top. (Lately noted.)

La., New Orleans.—New Orleans Lake Shore Land Co. plans to develop 7000-acre tract in Eighth and Ninth wards for orange groves; 5-acre tracts.

La., New Orleans.—The Louisiana Co., C. W. Marsh, Gen. Dir., proposes to develop 10,000 acres on Bayou Teche for diversified farming, cattle, cane and corn; 12,000 acres near Berwick and Morgan City, and 20,000 acres in Rice Belt near Crowley.

Md., Berlin.—Castle Hill Orchard Co. (lately noted inceptd., capital stock \$30,000, by Orlando Harrison and others) will plant trees, mostly apples, for commercial orchard.

Mo., St. Louis.—John Nelke purchased 6½ acres fronting 1050 ft. on Carter and Dryden Aves. for \$40,000, and will improve; construct streets and sewers.

Mo., St. Louis.—Capital Stock Farms Co., capital stock \$200,000, inceptd. by Edward C. Lasater of Falfurrias, Tex.; Chas. T. McCann, Kansas City; John W. Sanders of St. Louis and others.

N. C., Kinston.—Carolina Land & Development Co. (lately noted inceptd., capital stock \$100,000) organized; J. E. Hood, Pres.; J. F. Taylor, V.-P.; C. Oettinger, Secy.-Treas.; develop probably 20,000 acres in Pitt and Craven counties; no machinery needed.

S. C., Charleston.—Riverview Farm Co., capital \$30,000, inceptd.; Walter F. Livingston, Pres. and V.-P.; Montague Triest, Secy.-Treas.

Tenn., Memphis.—Cedar Crest Farm, Inc., capital stock \$10,000, inceptd. by Henry C. Loeb, T. B. Loeb, E. H. Ullman, Roy Stuart and others.

Tenn., Chattanooga.—Chattanooga Truck Farms, capital \$100,000, elected J. G. Burton Pres., John N. Johnson Secy., and C. D. Gordon Treas.; offices at 8th and Cherry Sts. (Lately noted inceptd.)

Tenn., Chattanooga.—Suburban Estates Co., capital \$100,000, inceptd. by Theo. F. King, W. A. Sudd, T. R. Preston and others.

Tenn., Chattanooga.—Suburban Estates Co., capital \$100,000, inceptd. by Theo. F. King, W. A. Sudd, T. R. Preston and others.

Tenn., Kenton.—Wilton Wade Land Co., Trenton, Tenn., organized; Wilton Wade, Pres.; C. T. Arnold, Gen. Mgr.; both of Kenton; will develop 1000 acres near Kenton; divide into lots, build houses, etc.; cost of improvements \$7000 to \$8000. (Lately noted at Tenn., Gibsonville, inceptd. as Walton Wade Land Co., \$50,000 capital stock.)

Tex., Cotulla.—Riverdale Farm Co., capital stock \$128,000, inceptd. by L. Clark Dunn, Matt Russell and H. E. Plummer.

Tex., Cotulla.—Riverdale Farms Co., capital stock \$128,000, inceptd. by L. Clark Dunn, Matt Russell and H. E. Plummer.

Tex., Houston.—C. B. Harris Co., 325 First National Bank Bldg., plans \$10,000 expenditure for improvements continuing home site development in harbor district.

Tex., Waco.—City votes Feb. 16 on \$30,000 bonds for parks and park improvements; J. H. Mackey, Mayor.

Va., Coeburn.—Banner Land Co. inceptd. with \$10,000 capital; Horace Hardaway,

Pres., St. Paul, Va.; Guido E. Heuser, Secy., Coeburn.

Va., Lynchburg.—Monroe Land Corp., capital stock \$10,000, inceptd.; J. Stewart Walker, Pres.; C. S. Hunter, V.-P. and Treas.; A. W. Mosby, Secy. and Mgr.

Va., Norfolk.—Buckroe Beach Improvement Corp., capital \$25,000, chartered; M. J. Madden, Pres.; C. R. Carver, Secy.

Va., Richmond, R. F. D. No. 5.—Varina Farm, \$105,000 capital stock, will develop acreage near Richmond for general farming; P. N. Stoneman, Pres. (Lately noted inceptd., \$200,000 capital stock.)

W. Va., Buckhannon.—Alleghany Fruit Farm Co., capital stock \$10,000, inceptd. by C. C. Wood, C. S. Holden, M. E. Hymes and others.

W. Va., Pleasant Valley.—Dimmeydale Co., capital \$10,000, inceptd. by W. H. Dimmey, Jos. A. Dimmey, Louis G. Dimmey and others, all of Wheeling, to develop property at Pleasant Valley; offices 1221 Market St., Wheeling.

## LUMBER MANUFACTURING

Ark., Arkadelphia.—Arkansas Lumber & Supply Co. organized; N. V. Wright, Pres. and Treas.; H. L. Wright, V.-P.; will conduct wholesale and retail lumber business; has building. (Lately noted inceptd., \$10,000 capital stock.)

Fla., Oakhurst.—Oakhurst Saw & Planing Mill Co., capital stock \$10,000, inceptd.; H. C. Fairchild, Pres.-Treas.; Alfred Coward, Secy.; Mary Coward, Asst. Secy.

Florida.—Florida Pine & Cypress Corp., capital \$200,000, inceptd. by F. A. C. W. and E. Woodward of Mt. Vernon, N. Y.

Ga., Stillmore.—Stillmore Electric Light Co., W. L. Clarke, Prop., contemplates erecting planing mill. (See Electric Plants.)

Ky., Pineville.—Ben F. Hawn Lumber Co., capital \$15,000, inceptd. by Ben F. Hawn, Julia R. Hawn and James M. Gilbert.

Ky., Wilmore.—Jones-Savage Lumber Co. organized; A. P. Jones, Pres.; E. M. Savage, Secy. and Mgr.; Mrs. M. M. Savage, Treas.; conduct retail lumber yard; erect 40x60-ft. building; frame; brick; iron siding; metal roof; cost \$800 to \$1000; bids opened about Feb. 1; no machinery at present. (Lately noted inceptd., \$3000 capital stock.)

La., Monroe.—Anderson Land & Timber Co., capital stock \$15,000, advises will purchase and develop hardwood timber and farm lands; now owns 6,000,000 ft. hardwood in fee, on which developments will be commenced about April 1; Arthur C. Call, Pres., and John A. Moore, Secy.-Treas., both of Anderson, Ind.; J. E. Henderson, V.-P., Monroe. (Mr. Henderson lately noted as purchasing timber.)

Miss., Kilm.—Jordan River Lumber Co. will build mill, replacing burned plant; 10-hour capacity, 125,000 ft. lumber; ordinary mill construction; main building 250x60 ft.; 2 band saws, 8 ft. horizontal resaw, lath mill, etc.; turbo generator set of about 250 K. W., 3-phase, turbine driven by exhaust of mill engines mixed with live steam; this set operate electric planing mill and light entire plant; contractor, architect and construction engineer, Filer & Stowell Co., Milwaukee. (Lately noted.)

Mo., Lees Summit.—J. C. Jones Lumber Co., capital stock \$200,000, inceptd. by J. C. Jones, W. B. Jones, A. G. Jones and Mrs. Lulu Jones.

N. C., Concord.—J. P. Allison, W. W. Flowe, L. D. Coltrane and others purchased 7000 acres timber land for development.

N. C., Spring Hope.—Spring Lumber Co. (lately noted inceptd., capital stock \$25,000) continues mfr. of pine lumber; plant equipped; daily capacity 12,000 ft.; Geo. Dillich, Pres., Butler, Pa.; E. M. Piches, Secy.; Wm. Milton Prescott, Treas. and Mgr.

N. C., Wallace.—Camp Mfg. Co., Wilmington, purchased Pender, Duplin and Sampson county timber land reported to contain (estimated) exceeding 125,000,000 ft. standing timber; will build large sawmill.

Okl., Ardmore.—Western Lumber Rig & Tank Co., capital \$12,000, inceptd. by C. E. Sykes of Ardmore, C. P. Smith of Tulsa and J. J. McDonald of Cleveland, Okla.

Okl., Oklahoma City.—James Kilpatrick Post & Tie Co., 410 Baltimore Bldg., organized; M. W. James, Pres.; John Kilpatrick, V.-P.; Jas. J. Kilpatrick, Secy.-Treas.; jobbing and wholesale; will not mfr.; handle oak products, posts, cordwood, tie poles, etc. (Lately noted inceptd., \$5000 capital stock.)

Tenn., Tellico Plains.—Tellico River Lumber Co. will rebuild mill recently burned; daily capacity, 150,000 ft. lumber.

Tenn., Nashville.—J. W. Boyd & Co., cap-

italized at \$25,000, inceptd. by J. W. Boyd, W. R. Hornbuckle, W. L. Pierce and others.

Tenn., Nashville.—Morford Lumber Co., capitalized at \$10,000, inceptd. by Chas. M. Morford, J. M. Whitson, W. N. Bryant and others.

Tex., Gilmer.—Denman-Massey Lumber Co., capital stock \$20,000, inceptd. by T. L. Denman, W. E. Haydon and M. Crump.

Tex., Houston.—J. R. Sturgill purchased 11½ acres in Baker Addition for \$20,000 and will build saw and planing mill on portion of tract; reported to install machinery costing \$30,000.

Tex., Paris.—House Hardwood Co., capital stock \$40,000, inceptd. by J. D. House, J. M. Gillespie and Max Chapman.

W. Va., Dobbin.—Whitmer Lumber Co. is reported to build sawmill.

## MINING

Ala., Birmingham.—Stone, etc.—J. B. Robinson Co. contemplates development of stone quarry; products, crushed stone for road and concrete work, and lime.

Ala., Gantt's Quarry.—Marble.—Alabama Marble Co., John Stephen Sewell, V.-P. and Gen. Mgr., advises is developing quarry in two-tunnel form, thus getting working space deeper into sounder stone, this development using portion of planned for \$150,000 additional capital; present machinery needs supplied; quarry Alabama marbles; manufacturer and wholesale dealer; telegraph office, Sylacauga; main sales office, Gantt's Quarry; branch sales office, Brown-Marx Bldg., Birmingham. (Enlargement previously noted under consideration.)

Ark., Pyatt.—Zinc.—D. W. Milum and Lee Estes will develop zinc properties.

Ga., Estelle (not a P. O.).—Iron.—Estelle Iron Ore Co., capital stock \$100,000, inceptd. by C. E. Chamberlain, W. A. Malone, Harris K. Vance and Franklin Harris, all of Chattanooga, Tenn.

Mo., Kansas City.—Marble.—National Marble Co., capital \$20,000, inceptd. by A. D. Madaria, Jos. L. Tupy and John J. Floyd.

Mo., Miami.—Lead and Zinc.—Lennan Lead & Zinc Co. is reported as contemplating erection of concentrating plant in connection with proposed development of 200 acres lead and zinc lands.

Mo., Neck City.—Zinc.—E. M. McKay and others will develop zinc property.

Mo., Joplin.—Zinc.—Oak Orchard Mining Co., A. R. Snyder, Secy., 17 Model Bldg., will develop mining lease. (Lately noted.)

Okl., Wetumka.—Hokosy Mining & Development Co., capital \$6000, inceptd. by Thos. H. Dunson, Luna E. Dunson and S. H. Williams.

Va., Chula.—Mica.—Virginia Mica & Mining Corp. chartered with \$10,000 capital; George H. Matchett, Pres.; L. B. Kinzer, Secy.; both of Philadelphia, Pa.

Va., Pulaski.—Pyrites, etc.—Carroll Chemical & Nodulizing Corp., capital stock \$300,000, chartered to mine pyrites, mfr. sulphuric acid, etc.; A. Heckscher, Pres., New York; Chas. T. Stout, V.-P., Portland, Conn.; Chas. H. George, Secy.-Treas., East Orange, N. J.; John F. McKee, director, Pulaski.

## MISCELLANEOUS CONSTRUCTION

Ark., Fort Smith.—Mausoleum.—Arkansas Mausoleum Co., capital stock \$20,000, inceptd. with Geo. W. Lott, Pres.; Elmer E. Overman, V.-P., and Treas.

Ark., Garland.—Levee.—Garland Levee Dist., Miller County, J. D. Williams, Secy. Board of Directors, Texarkana, Ark., will construct 25 mi. levees on west bank of Red River; work to be let in 3 parts as follows: Stations 0 to 450, about 400,000 cu. yds.; 451 to 900, about 375,000 cu. yds.; 901 to 1317, about 310,000 cu. yds.; bids until Feb. 5; work suitable for construction with dragline machines or teams and scrapers; Morgan Engineering Co., Engr., 610 Goodwyn Institute, Memphis, Tenn.; lately noted. (See Machinery Wanted.)

Fla., Jacksonville.—Dam.—Carpenter & O'Brien plan to construct dam 1500 ft. long and 14 ft. high across mouth of Cedar Creek.

Fla., St. Petersburg.—City Comms. let contract G. S. Chapman of Tampa at \$242 to erect addition, 30x150 ft., to pier. (Lately noted.)

Ga., Savannah.—Cofferdam.—Chatham County Comms. open bids Feb. 12 to construct cofferdam around Augustine and outlet lock, pumping water out of space enclosed by dam and keeping that space dry; plans and specifications upon application; G. Reuben Butler, County Clerk. (See Machinery Wanted.)

La., New Orleans.—Levee.—Government let



contract to J. D. McGee, New Orleans, to construct levee protection; 4000 sq. yds. concrete facing; cost \$3500; material purchased; C. O. Sherrill, Capt. U. S. Engr. Corps. (Lately noted.)

Miss., Greenville—Levee.—Mississippi Levee Com. let contract R. L. Leonard at \$47,392 for levee construction of Greenville front south, and to J. C. Kaiser, St. Louis, Mo., for Upper Greenville levee construction.

Mo., Kansas City—Revetment.—U. S. Government will construct following standard revetment on Missouri River: 13,000 ft. 2 mi. from Lupus, Mo.; 18,000 ft. 2 mi. from Napoleon, Mo., and 13,000 ft. 3 mi. from Arrow Rock, Mo.; bids until Feb. 16; information on application to Herbert Deakyn, Maj., Engrs. (See Machinery Wanted.)

Mo., Liberty—Levee.—Birmingham Drainage Assn. agreed upon definite plans and appointed committee (John Moffitt, John Powell, Felix LaForce and others) to supervise construction of 11-mi. levee down north side Missouri River from Milwaukee Bridge; redeem 3300 acres land across Missouri River between North Kansas City, Blue Valley and Sugar Creek; estimated cost \$500,000.

N. C., Spray—Power Plant.—Marshall Field & Co., executive offices, Chicago, advise they contemplate building central power plant at their Spray mills. (Lately reported to cost \$150,000.)

N. C., Wilmington—Docks and Wharves.—City will vote Mch. 5 on bonds not exceeding \$150,000 to acquire docks and wharves. Address The Mayor. (Lately noted.)

S. C., Charleston—Dredging.—Government let contract P. Sanford Ross, Inc., Jersey City, N. J., at \$50,000 for dredging in Win-yah Bay; G. P. Howell, Major, Engrs., U. S. Engrs. Office. (Call for bids lately noted.)

Tex., Bay City—Levee.—Matagorda County Commrs. Court ordered election Feb. 14 to vote on \$100,000 bonds to improve protection levee made unsafe by December floods.

Tex., Dallas—Levees.—C. Stevenson, 618 Wilson Bldg., will let contract for about 15,000 cu. yds. levee construction on East Fork. (See Machinery Wanted.)

Tex., Velasco—Levee.—Drainage Commrs. Velasco Dist. of Brazoria county will petition County Commrs., Angleton, Tex., to order election to vote on \$10,000 bonds to repair and strengthen levee damaged by late flood.

W. Va., Piedmont—Dam.—West Virginia Pulp & Paper Co., John G. Luke, Pres., Fifth Ave. Bldg., New York, advises will in spring repair small section of Stony River Dam recently damaged by flood.

### MISCELLANEOUS ENTERPRISES

Ala., Birmingham—Laundry.—Domestic Laundry Co., Ave. E, will erect one-story brick building; cost \$2500.

Ark., Little Rock.—Rogers Hardware Co., capital stock \$10,000, inceptd.; J. W. Helme, Pres.; Jas. Cain, V.-P.; W. B. Vickery, Secy.-Treas.

Fla., Crystal Springs—Dairy.—Crystal Springs Poultry Assn. interested in plan to establish dairy.

Ga., Athens—Greenhouse.—State College of Agriculture will erect semi-iron or pipe-frame greenhouse; 75 ft. long, consisting of range of 3 houses, each 25 ft. wide; workroom, 75 ft. long; cement foundations; superstructure of workroom cement on metal lath; heating from central power plant; cost \$8000; this building will constitute one wing of series of greenhouses planned. (Lately noted.)

Ga., Savannah—Contracting.—Beasley Contracting Co., capital stock \$25,000, inceptd. by Bryant Beasley, W. Andrew Beasley and T. M. Champan.

Ga., Tallapoosa—Iron Separating.—Merrill B. Parker contemplates installation of plant to separate iron from blast-furnace slag; has not purchased machinery. (See Machinery Wanted.)

Ky., Louisville—Dyeing and Cleaning.—Swiss Cleaners and Dyers, 617 Fourth Ave., H. E. Mechling, Pres. and Mgr., will open proposals May 1 on \$10,000 fireproof building; install dyeing, dry cleaning and rug-cleaning machinery. (Lately noted.)

Ky., Owensboro—Grain Elevator.—Bransford Mills (C. W. Bransford and others) plans to build grain elevator. (See Flour, Feed and Meal Mills.)

Miss., Gulfport—Shipyards.—Tom Favre plans organizing company to purchase and improve shipyards.

Mo., Kansas City—Laundry.—Rockhill Laundry Co., capital \$3000, inceptd. by G. G. Mapes, D. A. Squires and E. H. Lowry.

N. C., Asheville—Contracting, etc.—North Carolina Development Co., Edward J. Frost, Treas., organized, \$100,000 capital stock, to

conduct general contracting, build and finance building of houses, etc.

N. C., Charlotte—Advertising.—National Motion Picture Advertising Co., capital stock \$100,000, inceptd. by W. F. Aldrich, Cyril G. Smith and H. R. Glasscock to promote advertising in motion-picture theaters.

N. C., Fuquay Springs—Contracting, etc.—Jones, Woodall & Black, Box 15, established for general contracting and building; W. N. Jones, Pres.; W. C. Black, Archt. and civil engineer; O. L. Woodall, Supt. construction. (See Machinery Wanted.)

N. C., Hendersonville—Abattoir.—D. S. Pace will build slaughter-house; also build rendering plant to convert waste into fertilizers.

N. C., Kinston—Steamboat Line.—Seven Springs Steamboat Co., capital stock \$10,000, inceptd. by C. F. Harvey of Kinston, J. R. Murvin of Seven Springs, C. L. Sammons of Newbern.

Okla., Oklahoma City—Printing.—Consolidated Printing Co., capital \$100,000, inceptd. by Morris Burke, Joe Hurst and G. O. Fenimore.

S. C., Clinton—Live-stock.—Young Bros. Live Stock Co., capital \$10,000, inceptd. by John H. Young, R. H. Young, R. H. Hatton and others.

Tenn., Chattanooga—Dairies.—Hill Ice Cream Co. will increase capital to build and equip milk department with daily capacity 4000 gals.; probably build 2 or 3 concentrating plants in milk territory. (See Miscellaneous Factories.)

Tenn., Franklin—Creamery.—H. M. Nicholas and Allen Brown will build creamery and cheese factory.

Tenn., Nashville—Bottling.—Nashville Bottling Works, capitalized at \$10,000, inceptd. by J. R. Hill, Chas. S. Martin, John D. Fletcher and others.

Tenn., Nashville—Publishing.—Draughton Textbook Co., capital stock \$12,000, inceptd. by W. E. Ward, W. V. Flowers, A. B. Way and others.

Tex., Robstown—Printing.—Robstown Printing Co., capital stock \$3000, inceptd. by Arthur R. Rice, J. P. Sands and F. A. Frazee.

Tex., Windom—Hardware.—Windom Hardware Co. inceptd. by C. W. Armstrong, H. B. Ward and J. S. Boyet.

Va., Covington—Publishing.—Covington Virginian, 202 Bath St. (lately noted inceptd., capital \$20,000), organized; Richard F. Belrne, Pres.; M. Garnett Russell, Secy.-Treas.; daily newspaper and commercial printing; rent building; install equipment; date of opening machinery bids not set. (See Machinery Wanted.)

Va., Roanoke—Contracting.—Sale Contracting Co., capital \$20,000, inceptd.; H. M. Luck, Pres.; R. S. Sale, Secy.

W. Va., Huntington—Incinerator.—City is considering erection of garbage crematory; Mr. Wells, Commr. of Charity, is investigating relative to plans and specifications.

### MISCELLANEOUS FACTORIES

Ala., Birmingham—Distillery.—Jones Valley Distilling Co., capital stock \$30,000, inceptd.; A. D. Walstrom, Pres.; A. R. Walstrom, V.-P.; P. F. Walstrom, Secy.-Treas.

Ala., Birmingham—Tires, etc.—Nolan Tire & Rubber Co. inceptd. with C. A. Nolan, Pres. and Treas.; D. Nolan, Secy.

Ala., Mobile—Tools.—United States Tool Co., capital \$25,000, inceptd. by Robt. A. Howard, Edgar P. Daughdrill, Wm. F. Rohr and Fred W. Bacho.

Ala., Mobile—Ice Cream.—Columbia Ice Cream & Creamery Co., capital stock \$25,000, inceptd.; M. A. Nesbit, Pres.; E. M. Williams, V.-P.; D. M. McCrary (Memphis, Tenn.), Secy.

D. C., Washington—Gelatine Paper.—H. M. Conger Co., capital stock \$500,000, inceptd. by Frank T. Rawlings, 1425 New York Ave. N. W.; H. M. Conger and W. Ballinger.

Ga., Atlanta—Clothing.—Sam Haskell, Chicago, Ill., is reported to establish clothing factory; secured location.

Ga., Eastman—Bakery.—J. M. and M. P. Cooper will establish bakery.

Ga., Macon—Ice Cream.—Odum Ice Cream Co., C. A. Odum, Pres., let contract H. F. Haley to erect addition; brick and concrete; cost \$5000; Curran Ellis, Archt., Macon.

Ky., Greendale—Shoes.—Prison Commrs., Frankfort, Ky., are reported to establish shoe factory at Greendale Reform School.

Ky., Jackson—Wood Alcohol.—W. W. Tarbell, Philadelphia, Pa., and associates of Titusville, Pa., will erect wood-alcohol plant; extract alcohol from charcoal; construction begun.

Ky., Louisville—Clothing.—Model Cloak & Suit Co., capital \$10,000, inceptd. by Harry Cohen, Max M. Cohen and Jennie Cohen.

Ky., Louisville—Cloaks and Suits.—Model Cloak & Suit Co., capital stock \$10,000, inceptd. by Harry Cohen, Max M. Cohen and Jennie Cohen.

La., Alexandria—Paints, etc.—G. H. Cambre Co., G. H. Cambre, Pres. and Mgr. (lately noted inceptd., capital stock \$25,000), will install machinery to manufacture compounded lubricating oils, paints and sanitary specialties; has building. (See Machinery Wanted.)

La., Jennings—Rice.—E. P. Fox will establish rice mill.

La., New Orleans—Macaroni.—Southern Macaroni Co., capital \$40,000, inceptd. by Leon Tujague, Albert Tujague and Louis Robichaux.

La., New Orleans—Standard Condiment Co., capital \$25,000, inceptd. by Henry Berlin, Thos. L. Hardin, R. S. Simpson and Thos. L. Hardin, Jr.

La., Shreveport—Coolers.—Universal Cooler Co. (lately noted to be inceptd., capital \$100,000) will have following officers: A. J. Mercer, Pres.; Geo. M. Hearne, V.-P.; W. A. Freeman, Secy.; J. W. Allen, Treas.; consider propositions on equipment. (See Machinery Wanted.)

Md., Baltimore—Beef Products.—Consolidated Beef & Provision Co., 104 S. Exeter St. (lately noted inceptd.), will erect building and install packing-house equipment. (See Canning and Packing Plants and Machinery Wanted.)

Mo., Jennings, P. O. at St. Louis—Tools.—Acme Tool Co. purchased site and contemplated enlarging plant.

Mo., Kansas City—Chemical Products.—Schofield Laboratories Co., capital stock \$50,000, inceptd. by Geo. L. and C. L. Schofield and E. J. Geltmann.

Mo., Kirksville—Stock Powder.—Famous Stock Powder Co., capital \$10,000, inceptd. by E. W. Davis, E. M. Davis and W. M. Saxbury.

Mo., King City—Electric Supplies.—King City Electric & Mfg. Co., capital \$8000, incorporated by Geo. Ward, Geo. P. Adams and Harry V. Forrest.

Mo., Mountain Grove—Overalls.—Mountain Grove Overall Co., capital \$5000, inceptd. by J. F. Ellis, E. J. Green and L. H. Williams.

Mo., St. Joseph—Writing Tablets, etc.—Western Tablet Co. will erect addition to plant at 11th St. and Mitchell Ave.; 2 stories; 70x300 ft.; cost \$20,000; when completed will provide daily capacity 200,000 tablets, composition and notebooks, double present capacity.

Mo., St. Louis—Umbrellas.—Mohr Umbrella Co., capital stock \$50,000, inceptd. by Bernard Mohr, Sr., Bernard E. Mohr, Jr., and Rosa Mohr.

Mo., St. Louis—Clothing.—Montrose Cloak & Suit Co., capital stock \$10,000, inceptd. by David Goldman, Joseph H. Goldman and others.

N. C., Asheville—Bottling.—Asheville Pepsi-Cola Bottling Co., 30 Gudger St., capital stock \$25,000, incorporated; M. McOttinger, Pres.; Geo. C. Dogan, V.-P. and Treas.; Chester Brown, Secy.-Mgr.; plant equipped; daily capacity 400 2-doz. crates.

N. C., Charlotte—Candy.—Bostick Candy Co., authorized capital \$100,000, inceptd. by S. M. Bostick, W. P. Bostick and Jos. H. Bostick, Jr.

N. C., Elizabeth City—Harness, etc.—R. V. Marchant will install new machinery for shoe and harness work.

N. C., Greensboro—Creamery.—Z. L. Groome, R. H. Mitchell, Tom Pemberton and others will organize company with probably \$6000 capital to establish creamery.

N. C., Greensboro—Electric and Gas-lighting Fixtures, etc.—L. D. Sergeant advises relative to lately-noted purchased plant of Central Electric Co.: New company to be organized and inceptd.; building of old company at 315 S. Elm St. to have new front and improved interior; install additional machinery, including motors, buffing and grinding heads, drill presses, plate dynamos, pipe-threading machines, etc., to manufacture electric, gas and combination lighting fixtures. (See Machinery Wanted.)

N. C., Hampstead—Lime.—Alco Lime Co., Wilmington, N. C., inceptd., \$10,000 capital stock; K. Clyde Council, Pres., Wananish, N. C.; St. J. L. Springs, V.-P.; J. B. Brinkley, Jr., Secy.-Treas.; buildings on site; machinery purchased; daily capacity 10 tons pulverized shells.

N. C., Wilmington—Pine Tar Products.—Shepherd Chemical Co. let contract A. D. O'Brien to erect factory building; reinforced

concrete; fireproof; 60x125 ft.; part 1 and part 2 stories; fireproof metal roof; steam heat; electric lighting; electric elevator; secure water from deep wells; cost of building, exclusive of machinery, \$10,500; construction under supervision of Jas. F. Gause, Archt., Wilmington. (Lately noted.)

Okla., Muskogee—Vola-Vita Co., capital \$10,000, inceptd. by J. B. Troy, H. H. Harker and Lavina Wright.

Okla., Oklahoma City—Egg Carriers.—Shelton Egg Carrier Co., capital \$50,000, inceptd. by John M. Shelton and A. E. Davenport of Oklahoma City and D. H. Johnston of Ennet.

Okla., Oklahoma City—Quality Mfg. Co., capital \$2000, inceptd. by L. L. Klein, Edward Spiers and S. K. Bernstein.

S. C., Orangeburg—Blending and Bottling. County Dispensary Board will remodel warehouse and equip as blending and bottling plant; machinery ordered.

Tenn., Bristol—Ice Cream.—Twin City Coal & Ice Co. reorganized with \$50,000 capital stock; will build ice-cream factory and ice plant estimated to cost \$30,000.

Tenn., Chattanooga—Paper.—Archer Paper Co., capital stock \$50,000, inceptd. by John Stagmaler, W. H. Weatherford, L. M. Hall and others.

Tenn., Chattanooga—Paper.—Archer Paper Co., capitalized at \$50,000, inceptd. by John Stagmaler, W. H. Weatherford, Lawrence Hall and others.

Tenn., Chattanooga—Ice Cream.—Hill Ice Cream Co. will increase capital to build department with daily capacity 4000 gals.; probably build 2 or 3 concentrating plants. (See Miscellaneous Enterprises.)

Tenn., Columbia—Bottling.—Sip Bottling Corp. let contract J. H. Thomas & Co. to erect plant; 25x100 ft.; cost \$10,000; Wilburn Fox to be local manager. (Lately noted.)

Tenn., Franklin—Creamery.—H. M. Nicholas and Allen Brown will build creamery and cheese factory.

Tenn., Knoxville—Specialties.—Dan Qualls Specialty Co., capital \$5000, inceptd. by Henry Licht, Dan Qualls, Elisha Qualls and others.

Tenn., Memphis—Frost Bros. will let contract Jan. 25 to erect factory; 130x150 ft.; 3 stories; reinforced concrete construction; gravel roof; steam heat, costing \$4000; electric elevators, freight and 1 conveyor; Harker & Cairns, Archts., 528 Semitar Bldg., Memphis; cost, without mechanical equipment, \$60,000.

Tenn., Paris—Cereals.—Memphis Cereal Co. let contract C. V. Kridler for manufacturing building; 40x60 ft.; electricity for lighting and power; machinery ordered.

Tex., McAllen—Creamery.—McAllen Creamery Co. will increase capital stock to install refrigerating plant.

Tex., Houston—Timetables, etc.—Automatic Systems Co., capital stock \$10,000, being organized by S. C. Moran; will mfr. time-tables, guides, indexing devices, etc., patented by Mr. Moran.

Tex., Houston—Mantels.—Standard Brick & Stone Co., 216 Union National Bank Bldg., will install equipment to mfr. mantels.

Tex., San Antonio—Automobile Tires.—Texas Climatic Mfg. Assn., capitalization \$150,000, organized with J. A. Graham, Chrmn.; Francis T. Parks, Secy.; Edward H. Wicks, Treas.; Elliott W. Knight, Gen. Supt.; will erect one-story 250x150-ft. brick and concrete building; install machinery to mfr. automobile tires.

Tex., San Antonio—Refrigerators.—Sanitary Iceless Refrigerator Co. (inceptd. with \$50,000 capital stock in Los Angeles, Cal., in November by F. C. Smith of California, W. H. Crouch and others) removed main offices to San Antonio; will mfr. refrigerators and refrigerator apparatus, erect plants, grant privileges of mfr. under patents, etc.; main plant to be located at Los Angeles; others in Texas.

Va., Lawrenceville—Tobacco.—Co-operative Warehouse Co. will construct building, half for warehouse and half for dry prizery.

Va., Leesburg.—Dana Mfg. Co., capital \$15,000, inceptd.; Joe Nielson, Pres.; N. P. Nielson, Secy.

Va., Lynchburg—Medicine.—Southland Laboratories Co., capital stock \$15,000, incorporated; E. L. Erb, Pres.-Treas.; W. O. Taylor, V.-P.; W. N. Oglesby, Secy.

Va., Richmond—Asbestos Pipe Coverings, etc.—Southern Asbestos Mfg. Co., company's former name, resumed by Southern Pipe Covering Co., 16 Governor St.; no changes in capital stock; established branch office at Raleigh, in charge of J. S. Hammack.

Va., Richmond—Coffee, etc.—Aragon Coffee Co., Jno. W. Harrison, Pres., will continue established plant; coffee roasters and manu-



facturers of peanut butter; building erected; machinery installed. (Lately noted inceptd., \$100,000 capital stock.)

Va., Richmond—Paper Boxes.—A. S. Kratz Co., A. S. Kratz, Mgr., 2d and Decatur Sts., opens bids Feb. 15 to erect factory to manufacture paper boxes; 125x150 ft.; mill construction; cost \$20,000; cost of machinery (purchased), \$50,000; daily capacity, 25 tons paper boxes.

Va., Roanoke—Vitrolite and Marble Works. Roanoke Vitrolite & Marble Works, capital \$25,000, inceptd.; R. H. Angell, Pres.; J. E. Roan, Secy.

Va., Wytheville—Overalls.—R. P. Johnson, rear First National Bank, states he is organizing corporation to mfr. overalls. (See Machinery Wanted.)

## MOTORS AND GARAGES

Ala., Mobile—Automobiles.—Short Automobile Co., capital stock \$4000, inceptd. with Charles W. Short, Pres. and Gen. Mgr.; J. R. Barron, Secy.-Treas.

Ky., Louisville—Automobiles.—Bywater-Ortner Motors Co., 411 W. Green St., capital stock \$12,000, inceptd.; E. H. Ortner, Pres.; Fannie Ortner, V.-P.; N. W. Bywater, Secy.; deal in automobiles.

Md., Baltimore—Garage.—Zell Motor Car Co., 11-15 Mt. Royal Ave., has plans by Edw. H. Glidden of Glidden & Friz, 12th floor Maryland Casualty Bldg., for enlarging and improving salesroom; addition 38x100 ft., 4 stories and basement, fireproof; first floor for salesroom; second floor for charging and curing for Rauch & Lang electric; third floor for battery-room and storeroom; planned to rebuild sparking and electric car batteries.

Md., Baltimore—Garage.—Arundel Sand & Gravel Co., Pier 2, Pratt St., foot of Commerce St., purchased site at 241 S. Central Ave. on which to erect garage, blacksmith shops and stable.

Md., Baltimore—Automobiles, etc.—Frank W. Sandruck, 913 N. Howard St., will erect 2-story fireproof brick addition; Stanislaus Russell, 2900 Clifton Ave., is preparing plans.

S. C., Columbia—Automobiles.—Black-Frasier Motor Car Co., capital \$25,000, inceptd. with J. M. Black, Pres.; J. G. Frasier, Secy.-Treas.

S. C., Union—Garage.—Model Garage Co., capital \$6000, inceptd.; J. G. Going, Pres.-Treas.; J. F. Burbank, Secy.

Tenn., Nashville—Automobiles.—Auto Exchange & Sales Co., capital stock \$10,000, inceptd. by Wm. Brantly, John A. Wilsdorf, Jos. W. Baugh and others.

Tex., Cuero—Automobiles.—Cuero Auto Co. is reported to erect garage.

Va., Emporia—Automobiles.—Weiss Auto mobile Corp., chartered with J. P. Weiss, Pres.; Lucy Kistler, Secy.

Va., Martinsville—Garage.—H. V. Price and J. B. Shumate will erect garage; brick construction; 220x40 ft. site.

Va., Richmond—Automobiles.—Richmond Auto Exchange, capital \$5000, inceptd.; R. E. L. Marshall, Pres.; S. J. Greene, Secy.

W. Va., Wheeling—Automobiles.—Howe Co., capital \$25,000, inceptd. by James Henderson, James McCann, H. E. Dunlap, John Kohm and C. D. McCarty.

## ROAD AND STREET WORK

Ala., Millport.—W. A. Hicks & Son advise: Secured \$30,000 clay and gravel road contract in Lamar county.

Ark., Little Rock.—City will construct 14½ blocks 36-ft. streets on Spring St. from Markham to 10th St. and adjacent cross streets; bids until Feb. 3; Lund & Hill, Engrs., 203 W. 2d St., Little Rock. (See Machinery Wanted.)

Ark., Newport.—Jackson county contemplates organization into Improvement Dist., State Legislature to be petitioned in 1915 to authorize same, with view to road improvements costing \$300,000; H. R. Carter, State Highway Engr., Little Rock, advises that various materials are proposed, including some macadam.

Ark., Star City.—Lincoln County Comms., E. C. Norton, Secy., will construct 13 mi. rock or rock and gravel or gravel road in Dist. No. 1, Lincoln county; bids until Feb. 3 (extended date); Hugh R. Carter, State Highway Engr., is engineer for district; lately noted. (See Machinery Wanted.)

Fla., Brookville.—Hernando county is not ready to announce plans for road construction; voted \$200,000 bonds, mainly for roads; M. H. Snow, clerk County Comms. (Previously noted.)

Fla., Daytona.—Florida East Coast Automobile Assn., C. M. Bingham, Chmn. Com.,

interested in plan construct concrete approach to Silver Beach Ave.; reported cost, \$1000.

Fla., De Land.—City plans issuing \$200,000 bonds for street improvements, gas plant, sewerage, etc. Address The Mayor.

Fla., De Land.—Volusia County Comms. accepted proposition of Clyde Steamship Co. and made arrangements to construct 16-ft. shell road from De Land to De Land Landing on St. Johns River via De Land Junction; steamship company agrees to pay cost of road from De Land Junction to river, and county from De Land to De Land Junction.

Fla., Miami.—City awarded contract to R. B. Finkle to pave Avenue B from 5th to 6th street.

Fla., Port Tampa.—City Council authorized Hiram McElroy, Engr., Tampa, to prepare plans for improvements to include street paving, 6100 ft. long and 24 ft. wide, of either brick or concrete. (See Sewer Construction.)

Fla., St. Augustine.—St. John's county plans to invite bids for constructing 65 mi. county highways; probably open bids Feb. 24.

Ky., Bowling Green.—Warren county (lately noted to vote in March on \$300,000 bonds) contemplates completion of permanent road system, carrying main roads to county line, etc.; M. H. Crump, Road Engr.

Ky., Louisville.—David R. Lyman, City Engr., submitted list of street reconstruction required, estimated to cost \$540,000; \$215,000 available between now and Aug. 31 for street improvements, this being remainder of \$310,000 appropriation for 1914, balance having either been expended or under contract.

La., Lake Charles.—Jefferson parish appointed special com. with L. E. Robinson, Charles, Secy.; purpose to investigate methods of road improvements. (See Machinery Wanted.)

La., New Iberia.—Highway Dept., State Board of Engrs., Frank M. Kerr, Ch. Engr., New Courthouse Bldg., New Orleans, La., will construct public highway from New Iberia to St. Martin's parish line, distance of 4½ mi.; bids until Feb. 2. (See Machinery Wanted.)

La., New Orleans.—Interstate Land Co., 302 Canal-La. Bank Bldg., will construct 1 mi. sidewalk, 1 mi. cement curb and ½ mi. paved street at State St. extension, and about 3 blocks at Neron Pl.; character not determined; probably cement base with tarvia top. (See Land Developments.)

La., New Orleans.—City let contract Barber Asphalt Paving Co. to pave Apricot St., Carrollton Ave. to Joliet St., and Peters Ave., Magazine to St. Charles St.; to Grasser Contracting Co. for subsurface drainage on both streets. (Call for bids lately noted.)

La., New Orleans.—City awarded contract to Richard S. Biome Co. to pave Clouet St. from Royal St. to St. Claud with granite.

Md., Baltimore.—City asks bids until Jan. 3 on following paving: Contract No. 73, 57,500 sq. yds. sheet asphalt, 10,300 sq. yds. vitrified block; contract 74, 29,300 sq. yds. sheet asphalt and 3400 sq. yds. vitrified block; approximate quantities; R. Keith Compton, Chmn. Paving Com.; lately noted. (See Machinery Wanted.)

Miss., Kosciusko.—County Comms. let contract to McTigue, Hughey & McTigue, Hazelhurst, Miss., for about 10 mi. road work; Engr. Xavier A. Kramer, Magnolia, Miss.

Miss., Duncan.—W. S. Bobo, Engr., Clarksdale, Miss., states contract to construct about 40,000 sq. ft. sidewalks, crossings, etc., and about 1 mi. 8 to 15-in. sewers (combined system), will not be let until \$10,000 to \$12,000 bonds are sold; surveys not completed. (Previously noted to open bids Jan. 1.)

Mo., Festus.—City will expend about \$22,000 for paving various streets with brick on concrete foundation; Hiram and C. F. Phillips, Engrs., St. Louis; P. S. Terry, Mayor. (Lately noted.)

Mo., Kansas City.—Board of Public Works instructed City Engr. to pave Main St. viaduct with creosoted wooden blocks to cost \$10,300.

Mo., Nevada.—City will pave streets; W. B. Martin, Mayor.

Mo., Palmyra.—Marion County Comms. and citizens of Palmyra and Philadelphia agreed to complete 4-mi. road between rock road already built and gravel highway; estimated cost \$16,000.

Md., St. Marys City.—Wm. P. McDonald Construction Co. of Mount Vernon, N. Y., has contract at \$37,361 to pave 5.38 mi. road between St. Mary's City and Leonardtown. (Lately noted.)

Mo., St. Louis.—Board of Public Improvements let following contracts for street

paving: John McMahon, 1909 Madison St., St. Louis, at \$11,755 to reconstruct Cass Ave. to Brooklyn St.; at \$2261 to improve Obeur Ave. from Carter to Florissant Ave., and at \$1737 to improve Obeur Ave. from Lee Ave. to Penrose St.; Trinidad Asphalt Mfg. Co., Mehl Bldg., St. Louis, at \$653 to improve Virginia Ave. from Chippewa to Winnebago St. with asphalt; Hanick Quarry & Construction Co., Euclid and Ashland Ave., St. Louis, at \$6347 to improve Lucille Ave. from Tracy to Minka Ave. with Telford oil treatment. (Lately incompletely noted.)

N. C., Charlotte.—City let contract R. N. Hudson, Atlanta, Ga., to pave portions of Mint, Second, First and Church Sts. with sheet asphalt.

N. C., Goldsboro.—Road Comms. of Goldsboro Township, Wayne County, have \$25,000 bonds available for road construction.

N. C., Snow Hill.—Greene county road improvements (partially previously noted) include bonds voted late in 1913 as follows: Snow Hill township, \$20,000, Aug. 12; Olds, \$20,000, Aug. 12; Ormonds, \$20,000, Aug. 12; Bull Head, \$20,000, Sept. 23; Shine, \$10,000, Sept. 23; Jason, \$10,000, Nov. 11; Hookerton, \$10,000, Dec. 16; J. C. Exum, Chmn. Board County Comms.

N. C., Warrenton.—Warrenton township, Warren county, will construct roads; \$50,000 lately noted voted; W. B. Boyd, Warrenton, and others in charge of construction; P. M. Stallings, Macon, N. C., Chmn. County Comms.; engineer not selected. (See Machinery Wanted.)

Okl., Tulsa.—City plans paving E. 6th St. to city limits; 12 blocks; C. T. Hughes, City Engr.

S. C., Spartanburg.—City has estimates, etc., for paving various streets at estimated cost of \$85,000. Address City Engr.

Tenn., Dover.—Stewart County Comms. ordered vote in November on issuing \$100,000 bonds for road construction.

Tex., Beaumont.—Jefferson County Comms. agreed to pave 1.7 mi. road leading to Mansfield Ferry with rock asphalt if citizens interested contribute \$1500; estimated cost, \$2500.

Tex., Belton.—Road Dist. No. 4 of Bell county voted \$15,000 bonds to construct roads; district comprises 249 acres. Address County Comms. (Lately noted.)

Tex., Belton.—Road Dist. No. 5, Bell county, voted \$900,000 bonds to construct roads. Address County Comms. (Lately noted.)

Tenn., Sequatchie.—Bledsoe County Road Com., J. B. Vaughn, Chmn., plans issuing \$60,000 bonds for road construction, as follows: \$20,000, Pikesville to Litton; \$10,000, Pikesville to Spencer; \$10,000, Pikesville to county line via Morgan Springs and Fraley Gap; \$10,000 each on 2 valley roads.

Tex., Austin.—Houston & Texas Central R. R. will pave 3 blocks of 3d St. between Trinity St. and Congress Ave.; W. G. Van Vleck, Gen. Mgr., Houston, Tex.; New York office at 165 Broadway.

Tex., Denton.—Special Road Dist. of Denton County, comprising portions of Justices' Precincts Nos. 1, 6 and 7, will vote Feb. 21 on \$300,000 bonds to construct roads; 100 mi. road are named in petition. Address County Comms.

Tex., Elgin.—City votes February 17 on issuing \$30,000 bonds to repair roads and bridges. Address The Mayor.

Tex., Falfurrias.—Brooks County Comms. ordered election Feb. 14 to vote on issuing \$34,000 bonds for road construction.

Tex., Georgetown.—Dist. No. 1, Williamson county, is reported to vote on \$200,000 to \$250,000 bonds for road improvements. Address County Comms.

Tex., Greenville.—Hunt county road construction involves 80 mi. graveled or macadam roads; W. L. Beckham, G. L. Rutherford, E. E. Arnold and T. C. Foster elected on board to work in connection with County Judge and County Com.; Sid. L. Arnold, County Clerk. (Lately noted; voted \$400,000 bonds.)

Tex., Houston.—City awarded contract at \$20,572.25 to Texas Bithulthic Co. of Dallas to pave Austin St. from McGowen to Elgin Aves.

Tex., Houston.—City will pave Hamilton and Runnels Sts.; cost \$40,000; E. E. Sands, City Engr.; bids until Jan. 24. (See Machinery Wanted.)

Tex., Itasca.—Hill County Comms. ordered election Feb. 21 to vote on \$150,000 bonds for road construction.

Tex., Kaufman.—City voted bonds to pave streets. Address The Mayor.

Tex., Longview.—Texas, Louisiana and

Arkansas Highway Assn. organized with J. H. McHaney, Pres.; purpose: to build and maintain through trunk line highway between points in Arkansas, Louisiana and Dallas, Tex., intending this line to be official division of trans-continental highway through Eastern Texas.

Tex., McKinney.—Celia Good Roads Dist. No. 1, Collin county, votes Feb. 21 on \$125,000 bonds for road construction. Address County Comms.

Tex., San Antonio.—City let contract Roach-Manigan Paving Co., Memphis, Tenn., to pave Houston St. from City Hall to Alamo Plaza with creosoted wooden blocks on 6-in. concrete base.

Tex., San Marcos.—Hays County Comms. ordered election Feb. 14 to vote on issuing \$50,000 bonds for road construction.

Tex., San Marcos.—Hays County Comms. are considering ordering election to vote on \$50,000 bonds for road construction in district including Kyle and Umland.

Tex., Sulphur Springs.—City voted \$50,000 bonds for street improvements; address The Mayor. (Lately noted.)

Tex., Waco.—City votes Feb. 16 on \$65,000 bonds for street paving; J. H. Mackey, Mayor.

Tex., Waco.—McLennan County Comms. ordered election Feb. 14 to vote on \$1,075,000 bonds to construct roads. (Lately noted considering \$1,000,000 bond issue.)

Tex., Waco.—City will pave Franklin St. from South 1st St. to South 2d St.; about 245 sq. yds. paving, 570 lin. ft. gutter and 275 lin. ft. headers; North 11th St. from Vermont St. to Twice Ave.; bids until Jan. 23; G. E. Byars, City Engr.; Jno. V. Foster, Commr. Streets, Sewers and Public Improvements. (See Machinery Wanted.)

Tex., Yoakum.—City votes in Feb. on \$100,000 bonds for street improvements, etc.; address The Mayor. (Lately noted.)

Va., Clintwood.—Dickenson county will grade 1¼ mi. earth road between Clintwood and mouth of McClure River; bids until Feb. 2; G. P. Coleman, State Highway Commr., Richmond, Va. (See Machinery Wanted.)

Va., Ginter Park, P. O. at Richmond.—Town Council let contract Continental Public Works Co., 2 Rector St., New York, for street improvements to cost \$75,000; principal street is Chamberlayne Ave., west side of which will be paved with sheet asphalt and east side with asphaltic concrete on concrete base; other streets having medium traffic will be paved with bituminous concrete and those having light traffic will be macadamized and surface oiled; Gilbert C. White, Engr., Charlotte, N. C., will supervise improvements. (Call for bids lately noted.)

Va., Louisa.—Louisa county votes Feb. 3 on issuing \$50,000 bonds to construct roads as follows: Holidays Bridge to Mineral, 8 mi.; Mineral to Waltons Store, 12 mi.; Yanceyville to Louisa Court House, 2 mi.; Louisa county poorhouse to Cuckoo Dist., 3 mi.; width, 30 ft. Address Louisa County Commissioners.

## SEWER CONSTRUCTION

Ark., Clarendon.—Sewer Improvement Dist. No. 1, W. L. Jeffries, Chmn., engaged Winters & Dove, Engrs., Fort Smith, Ark., to prepare plans and specifications for sewer system; contract probably let in about 90 days. (See Machinery Wanted.)

Ark., Fort Smith.—Comms. Improvement Dist. No. 3 will construct drainage and storm sewers; W. B. Bell, Super. Engr.

Ark., Hope.—Government awarded contract at \$1985 to Tom Daley, 524 Pine St., Texarkana, Tex., to construct drainage system.

D. C., Washington.—Dist. Comms. are reported to have let contract to Geo. Hyman to construct 44th St. sewer.

Fla., De Land.—City plans issuing \$200,000 bonds for sewerage, gas plant, street improvements, etc. Address The Mayor. (Previously noted.)

Fla., Miami.—City awarded contract to J. D. Godman to construct sewer on 7th St. from Avenues F to J.

Fla., Port Tampa.—City Council authorized Hiram McElroy, Engr., Tampa, to prepare plans for improvements to include storm sewer system, paving and plant for softening and purifying water; cost \$40,000 to \$50,000; street paving proposed will be 6100 ft. long and 24 ft. wide of either brick or concrete.

Md., Baltimore.—Board of Awards, Jas. H. Preston, Pres., will lay cast-iron pipe line at Sewerage Disposal Works, sanitary contract No. 130; work includes 53 tons cast-iron pipe and special castings, 400 cu. yds. excavation and 50 cu. yds. embankment;



bids until Jan. 28 at City Register's office; plans and specifications on file in office of Calvin W. Hendrick, Chief Engr.; plans and specifications obtainable at office of Sewerage Com., 904 American Bldg. (See Machinery Wanted.)

Md., Laurel.—City plans obtaining authority to vote on issuing bonds to construct sewer system and lay additional water mains. George W. Waters, Jr., Mayor. (Lately noted.)

Miss., Duncan.—W. S. Bobo, Engr., Clarksdale, Miss., states contract to construct about 1 mi. 8 to 15-in. sewers (combined system) and about 40,000 sq. ft. sidewalks, crossings, etc., will not be let until \$10,000 to \$12,000 bonds are sold; surveys not completed. (Previously noted to open bids Jan. 1.)

Miss., New Albany.—City let contract W. J. Fielder, New Albany, at \$17,000 to construct sewer system; voted \$25,000 bonds for sewers, water-works extension and street improvements; S. W. Beville, City Clerk. (Lately noted.)

Mo., Sedalia.—City plans constructing sewage-disposal works for Southwest Sedalia; Engrs., Burns & McDonnell, Scarritt Bldg., Kansas City, Mo.

N. C., Waynesville.—City voted \$20,000 bonds to extend main sewer 2 mi.; C. H. Ray, Mayor.

N. C., Winston-Salem.—City is having plans prepared by J. L. Ludlow of Winston-Salem for septic tank and filtering bed.

Okl., Stigler.—City voted \$12,000 bonds for additions and repairs to sewerage and water systems. Address The Mayor.

Okl., Sulphur.—City Commrs. plan to extend sewer system.

S. C., Columbia.—City Development Co. is asking bids until Jan. 29 on sewer pipe; M. Goode Homes, Engr. (See Machinery Wanted.)

S. C., Columbia.—City votes Feb. 24 on \$50,000 bonds to extend sewer and water systems; John McNeal, City Engr. (Lately noted.)

Tex., Houston.—Engineering Dept., E. E. Sands, City Engr., will construct sanitary lateral sewers on McKinney Ave. from York to Chartres St.; cost \$17,500; also sanitary sewer on Austin St. from Anita to Elgin St.; cost \$5,000; bids until Jan. 23. (See Machinery Wanted.)

Tex., Houston.—City will construct storm sewer on Bryan St. from Garrow to German Sts.; cost \$7,000; bids until Jan. 24; E. E. Sands, City Engr. (See Machinery Wanted.)

Tex., Houston.—City let contracts to Hunter & Hunter, Oklahoma City, Okla., to construct following sewers: At \$333.50 storm-water sewer on Fannin St. from Peace St. to Pierce Ave.; at \$215.50 sanitary sewer on Montgomery and Leeland Aves. and short sewers on several other streets to be paved; at \$578.50 storm sewer on San Jacinto St. from Drew to Anita, Elgin to Stuart and Cleburne to Eagle St.; at \$21,216.15 storm sewers on Rusj, Capitol, Texas and other streets; E. E. Sands, City Engr. (Lately noted.)

Tex., Waco.—City votes Feb. 16 on \$15,000 bonds for storm sewers and \$10,000 bonds for sanitary sewers; J. H. Mackey, Mayor.

Tex., Wharton.—City plans to issue bonds previously voted for sewerage construction. Address The Mayor.

Va., Charlottesville.—University of Virginia considering plans to install sewage-disposal plant to cost \$17,500; E. A. Alderman is Pres.

### TELEPHONE SYSTEMS

Fla., Miami.—Miami Telephone Co., H. T. Whaler, Mgr., will expend \$50,000 to erect telephone exchange; 40x120 ft.; 3 stories; reinforced concrete; plans and specifications not complete; date of opening bids not set. (Lately noted.)

Ga., Hawkinsville.—L. F. Blasingame let contract O. R. Willis, Hawkinsville, to remodel and enlarge telephone exchange; add second story.

Md., Frostburg.—Avilton Mutual Telephone Co., H. S. Coleman, Pres., Sutton, Md., will construct 14 mi. main line and probably 20 mi. branch lines; no bids. (Lately noted.)

Okl., Chester.—Farmers' Mutual Telephone Co. Incptd. by Tom Green, A. H. Ezell and R. H. Gasswin.

Okl., Oklahoma City.—Pleasant Hill Telephone Co. Incptd. by C. H. Keller, O. W. Hartwell and J. J. Coltrane.

Okl., Perry.—Lone Elm Farmers' Telephone Co. (not Lone Elm Farm & Telephone Co. as lately reported), capital stock \$1000, incptd.; John W. Ruth, Secy.; operates 13 mi. rural line.

Okl., Yelton.—Honzl Telephone Exchange

incptd. by J. W. Blanchard of Yelton, Larkin Haynes, Otto Stanley and Paul Ritter of Gate, Okla.

Tex., Rio Grande.—Starr Telephone Co., Jno. Thaison, Secy. and Mgr., will construct 60 mi. transmission line and erect 105 drop switchboard metallic circuit exchange; contract let to Western Electric Co., New York. (Lately noted incptd., \$3000 capital stock.)

W. Va., Job.—Elkins Dry Fork Telephone Co., capital \$5000, incptd. by B. Y. White of Job; W. H. Arnold, Elkins; C. S. Armistead, Horton, W. Va., and others.

### TEXTILE MILLS

Ala., Anniston.—Hosiery.—Anniston Knitting Mills Co. plans to erect additional mill to more than double present capacity; probably construct 2-story building with 20,000 sq. ft. floor space; has 65 knitters, etc., for daily capacity 400 doz. prs. hosiery.

Fla., Jacksonville.—Cotton Goods.—Board of Trade negotiating with Tennessee manufacturers relative to locating cotton mill.

Ga., Cedartown.—Cotton Yarn.—A. E. Young, Cedartown; C. W. Bateson of Brooklyn, N. Y., and others interested in plan to utilize Josephine and Wahnetta mill properties for installation of cotton-spinning equipment; probably 15,000 spindles and accompanying machinery.

Ky., Paducah.—Woolen Goods.—Mayfield Woolen Mills, Mayfield, Ky., will install considerable new machinery in Paducah branch mill.

La., New Orleans.—Sweaters.—O. K. Knitting Mills, authorized capital \$25,000, organized with N. Orsher Pres., S. Kronengold Secy.-Treas., A. Radlauer Mgr.; all of New York; plant at Iberville, Bienville and Chartres Sts.; ordered 25 knitters, etc., for manufacturing sweaters. (Lately noted.)

N. C., Asheville.—Bed Spreads.—French Broad Mfg. Co. will install 8 Jacquard looms; has let contract; contemplates installing 52 additional.

N. C., Concord.—Ginghams, etc.—Brown Mfg. Co. will add 6000 spindles; has 9112 ring spindles, 296 twister spindles, 200 broad looms, 290 narrow looms, etc.

N. C., Forest City.—Cotton Goods.—H. G. Alexander is reported as planning organization of company to build cotton mill.

N. C., Maiden.—Cotton Yarn.—Union Cotton Mills will add lappers; contract awarded.

N. C., Raleigh.—Silk.—Geo. Duffy of Duffy Silk Co., Buffalo, N. Y., is reported as contemplating location of branch silk mill.

S. C., Camden.—Cotton Cloth.—Hermitage Cotton Mills will install 200 additional looms; has let contract.

Va., Lynchburg.—Sheeting, etc.—Lynchburg Cotton Mill Co. appropriated considerable capital for new machinery soon to be needed.

### WATER-POWER DEVELOPMENTS

Ky., Cadiz.—Geo. L. Smith is preparing to install electric-light plant; water-power; dam completed. (See Machinery Wanted.)

N. C., Buffalo Shoals (not a postoffice). Geo. H. Brown, Pres. Long Island Cotton Mills, First National Bank Bldg., Statesville, N. C., advises as follows: Statesville Flour Mills, Statesville Cotton Mills, Paola Cotton Mills and Imperial Oil Fertilizer Co., all of Statesville and consumers of electric power, are owners of water-power on east side of Catawba River at Buffalo Shoals; no arrangements completed for developments. (Long Island Cotton Mills, Long Island, N. C., lately noted considering construction of hydro-electric plant.)

N. C., Lookout Shoals (not a P. O.).—Southern Power Co., Charlotte, N. C., wires Manufacturers Record: "Nothing definite regarding Lookout Shoals." (Lately reported having decided to develop Lookout Shoals water-power.)

S. C., West Union.—W. A. Strothers and J. W. Bell, Walhalla, S. C., plan to construct hydro-electric plant at Rhett Shoals on Big Cane Creek, 2 mi. below West Union; transmit electricity to West Union and Walhalla.

### WATER-WORKS

Ark., Arkadelphia.—Arkansas Power Co., H. C. Couch, Pres., 308 State National Bank Bldg., Little Rock, Ark., acquired plant of Wilson Water & Electric Co., lately noted purchased. (See Electric Plants, Ark., Camden.)

Ark., Clarendon.—Water-works Improvement Dist. No. 1, W. L. Jeffries, Chrmn., engaged Winters & Dove, Engrs., Fort Smith, Ark., to prepare plans and specifications for water-works; contract let probably in about 90 days. (See Machinery Wanted.)

Ark., Little Rock.—Anderson Water Co., capital stock \$20,000, incptd. by A. G. Anderson, C. H. Ketchum and W. W. Ketchum.

Fla., Arlington Heights.—C. C. Tracey, 311 Masonic Temple, Jacksonville, let contract for construction of water-works and electric-light plant.

Fla., Port Tampa.—City Council authorized Hiram McElroy, Engr., Tampa, to prepare plans for improvements to include plant for softening and purifying water. (See Sewer Construction.)

Fla., Seabreeze.—City contemplates constructing water-works. Address The Mayor.

Fla., St. Petersburg.—City let contract to D. E. Fuller, Tampa, Fla., to construct two 10-in. wells; G. H. Warner, Supt. Water-works. (Lately incorrectly noted under Tampa.)

Ga., Columbus.—City engaged J. L. Ludlow of Winston-Salem, N. C., as engineer for water-works, to include pumping station, reservoir and filter; estimated cost, \$450,000; W. C. Campbell, City Engr. (Noted in Nov.)

Ga., LaGrange.—City, J. D. Edmundson, Mayor, will construct water-works as soon as bonds are sold; bonds (previously noted) \$150,000.

Md., Laurel.—City engaged Harry Stevens, Union Trust Bldg., Washington, D. C., to prepare plans for extension to water-works, installation of filter plant, etc.; probable cost \$30,000.

Md., Williamsport.—City plans issuing bonds to construct water-works and electric-light system. Address The Mayor.

Miss., Richton.—John MacDonald and others are interested in proposed construction of water-works, etc. (See Electric Plants.)

Miss., Vicksburg.—City engaged A. L. Dabney, Memphis, Tenn., as engineer for construction of water-works; estimated cost, \$264,000. (Lately noted.)

N. C., Gastonia.—Mr. Rutter of city light and power plant submitted plans to City Council for construction of reservoir lake at Long Creek to have capacity 8,000,000 to 10,000,000 gals. water.

Okl., Okemah.—City will arrange for proposed water-works extension; issued \$25,000 bonds; C. J. Holloway, Pres. of Board.

Okl., Stigler.—City voted \$12,000 bonds for additions and repairs to water and sewerage systems. Address The Mayor.

S. C., Columbia.—City votes Feb. 24 on \$50,000 bonds to extend water and sewer systems; John McNeal, City Engr. (Lately noted.)

S. C., Fort Mill.—City plans to issue bonds to construct water-works. Address The Mayor.

S. C., St. George.—S. S. Ingman, Bay and Abercorn Sts., Savannah, Ga., has franchise to install water-works, erect power house and electric distributing lines; cost \$30,000; daily capacity of water-works, 50,000 gals.; power house, 16x30 ft., brick or iron; install pumping plant, 125 gals. per min. from artesian well, electric generating plant, oil engine, four 15,000-gal. pneumatic tanks located under ground, 15,000 ft. water mains, 22 fire hydrants, 50-lb. pressure triplex pumps; is receiving bids for laying water mains and erecting power house; contract for machinery let to Modern Equipment Co., Savannah, Ga.; city lately noted as letting contract to install water-works, etc. (See Machinery Wanted.)

Tex., Waco.—City let contract J. G. Hamill, Thurbur, Tex., at \$8900 to drill artesian well at city filtration plant.

Va., Graham.—City let contract to Sluss-Baker Contracting Co., Graham, to construct 2½ mi. water mains, pump station, etc. (Lately noted.)

W. Va., Kingwood.—Kingwood Water Co., capital stock \$25,000, incptd. by J. A. Boyd, Mentor Hetzer, H. W. Hunter and others.

### WOODWORKING PLANTS

Ala., Bridgeport.—Handles.—Benbow Mfg. Co. is reported to build handle factory to utilize tupelo gum timber.

Ala., Florence.—Wagons.—Florence Wagon Co., C. W. Bransford, Pres., succeeds Florence Wagon Works; continue established plant. (Lately noted.)

Ark., Cotter.—Staves.—Mount Olive Stave Co., Batesville, Ark., advises does not anticipate improvements or increase of capacity this year. (Lately noted as purchasing stave timber, etc.)

Ark., Little Rock.—Boxes, etc.—S. A. Scott of Eudora, Ark., will establish plant to mfr. boxes, baskets and furniture; secured building in Factoria Addition.

La., Cedar Grove.—Handles.—Louisiana Handle Factory, 219 Continental Bank Bldg.,

Shreveport (lately noted incptd., under Shreveport, capital stock \$15,000), continues mfr. of hickory handles; daily capacity, 350 doz.; all machinery supplied; J. M. Messick, Mgr.

Miss., Greenwood.—Hoops.—Greenwood Hoop & Lumber Co., capital \$10,000, incptd. by Wm. Swank, H. C. Meyer and others.

N. C., Lincolnton.—Furniture.—Lincoln Furniture Mfg. Co., capital stock \$50,000, incptd.; D. E. Rhyme, Pres.; E. C. Baker, V.-P.; H. S. Robinson, Secy.-Treas.; M. W. Shook, Mgr.; plans buildings and machinery to cost about \$20,000; capacity about 3 cars furniture weekly.

S. C., Columbia.—Chairs.—Columbia Chair Co., capital \$50,000, incptd. with Logan C. Murray, Pres.; R. F. Warfield, V.-P.; E. L. Augustus, Secy.-Treas.

S. C., Greenville.—Furniture.—Reeder-Newton Furniture Co., capital \$6000, incptd. by W. J. Reeder, R. L. Newton and L. H. Wood.

S. C., Sumter.—Tobacco Hogheads.—Sumter Stave Co., O. D. Cleveland, Gen. Mgr., contemplates erecting plant to mfr. tobacco hogheads.

Tenn., Elizabethton.—Buggies, etc.—Brown Carriage Co., Clyde M. Brown, Secy.-Treas., Box 373, Bristol, Va.-Tenn., will establish plant to mfr. delivery wagons, passenger wagons, surreys and buggies; is removing plant from Bristol; has building; erect addition to cost about \$500; machinery includes drills for iron and boring machines, wood-working and rubber-tire machines; cost \$1675.

Tenn., Pulaski.—Buggies.—Robinson-McGill Buggy Co., capital \$15,000, incptd. by O. D. Wangster, J. B. Wilkes, W. B. Romine and others.

W. Va., Huntington.—Interior Finishings.—National Interior Finish Co., E. M. Byrne, Jr., Gen. Mgr., Box 335, will establish plant; erect main building, 90x200 ft.; brick with concrete floor; saw-teeth roof; fireproof; G. A. Ross, Archt., Cincinnati, O.; bids opened Feb. 1; Jno. Tipton, Catlettsburg, Ky., Engr. in charge; cost of woodworking machinery (purchased), \$9000; daily capacity, 50,000 ft. hardwood trimmings; will place machinery bids between Feb. 10 and March 1. (See Machinery Wanted.)

### FIRE DAMAGE

Ark., Fayetteville.—Fayetteville Daily Publishing Co.'s plant.

Ark., Fort Smith.—Dyke Bros.' warehouse; loss \$5000.

Ark., Earle.—McBee & Whitman Block, occupied by Earle Drug Co. and others; loss \$8000.

D. C., Washington.—Bedell Mfg. Co.'s upholstering goods factory at 633-642 D St. N. W.; loss on building, owned by Dr. Sam Polkinnhorn estate, \$5000.

D. C., Washington.—Residence near Congress Heights of John E. Powell, Ch. Electrician of Treasury Dept.; loss \$4000.

Fla., Carrabelle.—J. N. Maize's store and residence; loss \$7000.

Fla., Gainesville.—George Stavik's cigar factory, the building owned by August Wenske.

Fla., Jacksonville.—Atlantic Coast Line R. R. (E. B. Pleasants, Ch. Engr., Wilmington, N. C.) export terminals, including warehouse and contents; reported loss \$225,000.

Fla., Pensacola.—C. W. Upp's residence on North Hill; loss \$15,000.

Fla., Pensacola.—Leslie Brooks' residence on N. Guillemarde St.

Fla., Punta Gorda.—J. R. Sandlin's residence.

Ga., Atlanta.—Thos. B. Felder's residence on Howell Mill Rd.; loss \$30,000.

Ga., Atlanta.—W. H. Middlebrooks' residence; estimated loss, \$4000.

Ga., Atlanta.—Cotton States Belting & Supply Co.'s plant, loss about \$125,000, building owned by J. R. Smith; B. F. Avery & Sons' warehouse, loss about \$125,000, building owned by Mrs. E. P. Black.

Ga., Augusta.—Building of Moore estate on Broad St.; loss on building, \$3000.

Ga., Augusta.—Barn on Cut-Off Plantation at Beech Island, owned by J. C. Lamar; loss on building and contents \$7000.

Ga., Carrollton.—Mandeville Mills' Inter room and machinery of cottonseed-oil mills; loss about \$4000.

Ga., Payo.—Boston Cotton Oil Co.'s building, owned by W. W. Williams.

Ky., Louisville.—Residence of W. H. Netherland, Pres. of South Louisville Savings & Deposit Bank, at 4600 Grand Blvd.; loss \$35,000.

Ky., Harrodsburg.—Building occupied by Bell Telephone Exchange, W. E. Jackson, Horace Squiffitt and others; loss \$16,000.

Ky., Sebree.—Opera-house, owned by H. H. Holdman of Madisonville, Ky.; loss \$20,000; Sebree Hotel, owned by J. W. Collins of Memphis, Tenn.; loss \$20,000.

Ky., Slaughterhouse.—Prather Hotel, Ed. White's restaurant and picture show, A. G. Oakley's store and restaurant, O. L. Coffman's store, Masonic hall, Dr. W. C. Cosby's barber shop; loss \$10,000.

Ky., Marrowbone.—J. D. Distillery.

La., Garyville.—Lyon Cypress Co.'s fuel-house; loss \$15,000.

La., Grosse Tete.—A. H. Angeloz's store, owned by F. Grace; loss \$5,000.

La., Jeanerette.—Vaufray Co.'s double sugar mill of daily capacity 1000 tons; reported loss \$300,000.

La., Lake Arthur.—E. P. Fox's rice mill and warehouse; reported loss, \$8000.

La., Lake Charles.—Louisiana Grain & Milling Co.'s plant and warehouses; estimated loss, \$30,000.

La., Monroe.—Sugar Bros. Co.'s building; owned by Monroe Investment Co.; loss \$100,000.

La., New Orleans.—Reicke Cabinet Works at Annunciation and Callopo Sts.; reported loss, \$8000.

La., Ringgold.—Joe Woodard's gin; T. R. Lawhon's sawmill; Bryan Martin's store.

La., Shreveport.—W. G. Middleburgh's building at 1422 Marshall St., owned by J. G. Hester; loss \$3000.

Md., Fairfield.—F. S. Royster Guano Co.'s stock building, 550x100x40 ft., mainly of wood with corrugated-iron roof; offices, 1604 Munsey Bldg., Baltimore.

Md., Rockville.—Geo. C. Fry's residence; loss \$5000.

Md., Gaithersburg.—Mrs. Arthur Plummer's store and dwelling; Thos. I. Fuiks' dwelling; loss \$5000.

Miss., Bond.—E. E. Clayton's residence; Baptist Church. Address The Pastor.

Miss., Clinton.—Residences of F. M. Greaves, R. W. Hall, Mrs. M. E. Magee and Mrs. Charles Snyder; total loss \$30,000.

Miss., Oxford.—Mrs. N. J. Wilbourne's residence on University Ave.

Miss., Terry.—J. S. Allen's residence; loss \$3000.

Mo., Advance.—Advance Mercantile Co.'s building, owned by Arthur Mayfield, John Thorp, Rufus French and John Snako; loss \$10,000.

Mo., Elmer.—Postoffice, T. W. McDavitt's store, Fred Nixon's store, I. O. O. F. hall; loss \$50,000.

Mo., St. Joseph.—Furbeck & Co., 220-222 S. 5th St., state building was but slightly damaged. (Lately reported burned.)

N. C., Gastonia.—Dick Robinson's residence at Pleasant Ridge, owned by Mrs. T. G. Falls of Gastonia; loss \$4000.

N. C., Oak Ridge.—Oak Ridge Institute's two main buildings, owned by J. A. and M. H. Holt, loss about \$25,000; Methodist Protestant Church, loss about \$3000. Address The Pastor.

S. C., Aiken.—Schulhofer Stables; building owned by Kelly Toole.

S. C., Chester.—Brainerd Institute's dormitory; loss \$15,000 to \$18,000.

S. C., Johnston.—People's Cotton Oil Co.'s mill; loss about \$50,000.

N. C., Wilmington.—C. H. Dock's sawmill on Eagle's Island; loss \$6000.

S. C., Dillon.—W. C. Bracy's 2 stores on Railroad Ave.

Tenn., Carthage.—Dwelling of C. C. Davis, H. B. Highner, John B. Chapman and Newton Jones; loss about \$10,000.

Tenn., Jackson.—Joe S. Johnson's residence at Chester and Church Sts.; loss \$3000.

Tenn., Nashville.—Standard Candy Co.'s factory; loss on building (owned by Keith estate) and machinery reported as \$90,000.

Tex., Denton.—J. W. Funnells granary; reported loss \$4000.

Tex., Temple.—H. C. Glenn's dwelling, occupied by H. L. Sherrill, and servant-house; loss \$3000. (Loss lately incorrectly reported at \$7000 to \$8000.)

Tenn., Knoxville.—H. G. Cook's residence at 1121 Circle Park; loss \$3000.

Tex., Bronson.—Smith Mercantile Co.'s building; Meadow & Low's building; Wilson & Marshburn's building; J. Jones' building; Rushing & Force Drug Co.'s store; T. J. Brickley's store; 3 residences; Knights of Pythias Hall; livery stable and several other buildings; loss \$150,000.

Tex., Dallas.—J. B. Moreland & Co.'s store at Cement City; loss \$8000.

Tex., Hallettsville.—H. J. Shearer's dwelling; loss \$4000.

Va., Charlottesville.—Insulator locust pin factory leased and operated by L. H. Wiebel of Hagerstown, Md.; building and machinery owned by A. D. Cox estate.

Va., Fairfax.—R. E. Thornton's residence.

Va., Stafford.—Jacob Goldsmith's residence; loss \$5000.

Va., White Post.—Mrs. Nannie Kennerly's residence at Tanyard Farm, near White Post; loss \$4000.

W. Va., Clarksburg.—Sutter Roofing & Cornice Co.'s plant house; loss \$30,000.

W. Va., Clarksburg.—Consolidation Coal Co.'s tippie at Gypsy mining plant; reported loss, \$30,000; offices at Fairmont, W. Va.

W. Va., Clarksburg.—S. C. Watkins & Co.'s wholesale produce house and grain elevators; estimated loss, \$125,000.

W. Va., Moundsville.—Crystal Ice Co.'s factory; reported loss \$20,000.

W. Va., Moundsville.—Anti-window Rattler Co.'s excelsior factory; reported loss \$15,000.

## BUILDING NEWS

### BUILDINGS PROPOSED

#### APARTMENT-HOUSES

Ala., Birmingham.—Robt. D. Burger care Postal Telegraph Co. has plans by H. D. Breeding, 15 Watts Bldg., Birmingham, for apartment-house; 2 stories and basement; 5 suites of 6 and 7 rooms; steam heat; composition roof; bids being received.

Ala., Birmingham.—Steiner Bros. have plans by H. B. Wheelock, Steiner Bldg., Birmingham, for apartment-house; 100x150 ft.; ordinary construction; roofing not decided; furnace; cost (without mechanical equipment) \$75,000; construction by April 1. (Lately noted.)

Ala., Birmingham.—E. P. McNeal has plans by H. D. Breeding, 15 Watts Bldg., Birmingham, for apartment-house; 2 stories; brick-veneer; 4 six-room suites; steam heat; slate roof; cost \$12,000; foundations now in progress; bids in but contract not yet let.

Ga., Atlanta.—Otis & Holliday are reported to erect bachelor apartment-house at Whitehall and Forsyth Sts.; 3 stories; brick and steel; lower floor for stores; upper floors for apartments; plans in progress; cost \$50,000.

Ga., Atlanta.—Eugene Ragland is erecting 2 apartment-houses; 20 rooms each; 4 suites each; ordinary construction; stained shingle roof; hot-air heat, costing \$200 for each apartment; electric lighting; tile sidewalks; cost (without mechanical equipment) \$9000 each; Leila Ross Wilburn, Archt., Peters Bldg., Atlanta; construction by owners. (Lately noted.)

Md., Frederick.—Frederick Trust Co. has plans for store and apartment building. (See Stores.)

Mo., St. Louis.—Henry Wild will erect 2-story tenement-house at 467 Tennessee St.; cost \$3000.

Mo., St. Louis.—J. T. Hughes will erect 2-story tenement-house at 3933-35 St. Louis St.; cost \$7800.

Mo., St. Louis.—Nic Schwegler will erect 2-story flat at 4317-19 Obeart St.; cost \$5000.

Mo., St. Louis.—Theo. Degenhardt will erect 3 two-story tenement-houses at 3939-43 Tennessee St.; 22x54 ft.; cost (without mechanical equipment) \$4400 each; mill construction; composition and gravel roof; hot-air heat; electric lighting, costing \$100 each; plans and construction by owner.

Mo., St. Louis.—Daniel K. Freeman will erect four 4-room flats on Pennsylvania Ave.; cost, including site, \$16,000.

Mo., St. Louis.—Mrs. K. Knott will erect two 2-story tenement-houses at 2100-02 Allen St.; cost \$9000.

Mo., St. Louis.—R. C. Hudler will erect two 2-story tenements at 6757-61 Arsenal St.; cost \$6000 and two 1-story dwellings at 6744-64 Hoffman St.; cost \$4000.

Mo., St. Louis.—Trade Realty Co. will erect two 3-story apartment-houses at 5786-88 Westminster St.; cost \$25,000.

Mo., St. Louis.—Wm. Brennan will erect 2-story tenement-house at 2124 Geyer St.; cost \$3600.

Mo., St. Louis.—Jos. Degenhardt will erect two 2-story flats at 3633-37 Tennessee St.; cost \$11,000.

Mo., St. Louis.—Frank S. Neill will erect 2-story flat at 4140-A Kossuth St.; cost \$4000.

Mo., St. Louis.—A. W. Torluemki will erect 2-story tenement-house at 1036 Theobald St.; cost \$3000.

Mo., St. Louis.—Davis and Sophie Pettman will erect 3 double flat buildings at McRee and Spring Aves.

Mo., St. Louis.—Helena and Jas. H. Larr will erect 5 and 6-room apartment on Lafayette Ave.

Mo., St. Louis.—J. F. Fendler will erect two 2-story tenement-houses at 3336-40 Virginia Ave.; cost \$6000.

Tex., Houston.—C. E. Heidingsfelder is

having plans prepared by Jos. Finger, Houston, for apartment-house at Crawford St. and Dallas Ave.; 3 stories; brick, stone and terra-cotta; 122x67 ft.; 18 apartments each, with rear porch; steam heat; 4 entrances; separated from street by brick wall 4 ft. high; cost \$40,000.

Tex., Houston.—John J. Hawes is having plans prepared by Jos. Finger, Houston, for 3 apartment-houses at Bagby and Webster Sts.; stucco and stone; tiled baths; gas water heaters; overhanging Spanish tile roof; cost \$13,000 each.

W. Va., Huntington.—Mrs. T. W. Dinkins will erect 6-family apartment-house at 9th Ave. and 9th St.; cost \$9000.

#### ASSOCIATION AND FRATERNAL

D. C., Washington.—National Union Temple Assn., Chas. F. Haden, Pres., 4309 Kansas Ave., has plans by Gregg & Lisenring, Washington, for building for lodge, offices and stores; 7 or 8 stories; 50x139 ft. 8 in.; semi-fireproof construction; basement will contain bowling alleys, etc.; 1st floor, 2 stores and auditorium; 2d, 3d and 4th floors, lodgerooms; 5th, offices; 6th, lodgerooms and banquet hall; 7th, library, clubrooms, etc.; probably open bids in 1916.

Fla., Zolfo.—Roberts Bros. will erect business and lodge building. (See Stores.)

Ga., Atlanta.—W. D. Luckie Lodge, A. F. & A. M., will erect Masonic Temple; 3 stories and basement; 2 stores on lower floor; offices and banquet room on second floor and lodgerooms on third floor; cost \$22,500.

Ga., Waycross.—Odd Fellows' Building Assn. incptd. with \$10,000 capital to erect fraternal building.

La., Bogalusa.—Z. D. Lenoir of colored high school and N. M. Vincent are reported interested in erection of Y. M. C. A. building to cost about \$15,000.

Md., Cumberland.—Chosen Friends' Lodge No. 34, I. O. O. F., is reported to erect temple.

Mo., Webster Groves.—Webster Groves Lodge No. 84, A. F. and A. M., will erect temple to cost \$35,000.

Tenn., Bemis.—Y. M. C. A. is reported to erect \$20,000 building.

Tex., Lufkin.—A. F. & A. M. will erect Masonic temple; 3 stories.

Tex., Victoria.—Loyal Order of Moose will erect clubhouse; J. E. Ryan, A. E. Cline, S. H. Dixon, Jr., and Leopold Morris, Comm.

Va., Martinsville.—Piedmont Lodge, A. F. & A. M., will, it is reported, erect temple; lower floor for stores; 2 upper floors for lodgerooms; cost \$15,000.

#### BANK AND OFFICE

Ala., Andalusia.—C. Frank Galliher, 425 Bell Bldg., Montgomery, Ala., is preparing plans for office and store building. (See Stores.)

D. C., Washington.—National Union Temple Assn., Chas. F. Haden, Pres., 4309 Kansas Ave., has plans by Gregg & Lisenring, Washington, for office, lodge and store building; lately noted to cost \$100,000. (See Association and Fraternal.)

D. C., Washington.—Story & Cobb, 1102 Connecticut Ave. N. W., are reported as to erect office building at 1112 Connecticut Ave.; one story.

Fla., Plant City.—Hillsboro State Bank is having plans prepared by F. J. Kennard, Tampa, for bank and office building; 75x100 ft.; tile floors; steam heat; electric lights; each room provided with lavatory, hot and cold water; cost about \$35,000; will advertise for bids and begin construction in about 6 weeks; completion by July.

Fla., Panama City.—First National Bank has plans by C. Frank Galliher, 425 Bell Bldg., Montgomery, Ala., for building; 25x70

ft.; 22-ft. ceiling; classic design; Georgia marble, white-glazed terra-cotta; white-enamel brick; copper doors; cost about \$10,000.

Ga., Americus.—Eastlin Bros., Andersonville, Ga., are reported considering mercantile and office building. (See Stores.)

Ga., Atlanta.—W. D. Luckie Lodge, A. F. & A. M., will erect office, lodge and store building. (See Association and Fraternal.)

Ga., Atlanta.—Harry J. Bruce will erect 3-story office building; brick; day labor; cost \$7500.

Ga., Atlanta.—Reuben R. Arnold and Harvey Hill are reported as to remodel old city hall for store and office building. (See Stores.)

La., New Orleans.—Canal Louisiana Bank & Trust Co. purchased building of Teutonia Insurance Co. adjoining present structure, and is having plans prepared by Favrot & Livaudais, Archts., New Orleans, to remodel and connect both structures.

Ga., Pelham.—J. L. Hand is reported to erect store and office building. (See Stores.)

Md., Baltimore.—Horn & Horn, 303-305 E. Fayette St., acquired building at S. E. corner Fayette St. and Guilford Ave. and will remodel for offices and probably stores; Otto G. Simonson, Archt., Maryland Casualty Tower Bldg.; Henry Smith & Sons Co., Contr., Light and German Sts., Baltimore.

Md., Salisbury.—John H. Tomlinson and Robt. D. Grier are reported interested in organization of company to erect theater and office building.

Miss., Philadelphia.—Dr. D. J. Rush and R. Strubling will rebuild office, store and hotel buildings. (Lately reported burned.)

N. C., Durham.—Citizens' National Bank will erect building at Main and Mangum Sts.; stone and marble.

N. C., Fuquay Springs.—Bank of Fuquay, Kemp B. Johnson, Pres., is reported considering erection of bank building at Main and Depot Sts.

N. C., Salisbury.—Vance Cotton Mill, A. C. Lineberger, Pres., will erect office building.

N. C., Lumberton.—Bank of Lumberton receives bids to erect 2-story bank and office building; plans and specifications obtainable on application to Geo. E. Lafaye, Archt., Columbia, S. C., on deposit of \$10.

S. C., Columbia.—Wilson & Sompayrac, Archts., Columbia, prepared plans to remodel second floor of Malone's Music House for offices. (See Stores.)

Tenn., Nashville.—Nashville Bank & Trust Co. is reported to have purchased property adjoining present building and having plans by Asmus & Norton, Nashville, for connecting structures and remodeling at cost of \$60,000.

Tenn., Livingston.—Citizens' Bank & Trust Co. contemplates erecting building; 25x60 ft.; ordinary construction; patent or Carey's roofing. (See Machinery Wanted.)

Tex., El Paso.—Commercial Building Co., A. W. Bittick, Mgr., Commercial National Bank Bldg., leased property at Mesa Ave. and Mills St., and is reported to begin erection of building as soon as present tenants vacate; 12 stories; bank and stores on first floor; about 200 offices on upper floors, 50x86 ft.; fireproof; cost \$150,000; O. H. Thorman, Archt., El Paso. (Lately noted to open bids about April 1, 1915.)

Tex., El Paso.—City National Bank is reported to expend \$30,000 to enlarge banking room; extend east and south, about doubling floor space; change interior finish and install new fixtures.

Tex., El Paso.—Union Bank & Trust Co. is reported to have acquired Newman Investment Co.'s building and to remodel; will construct new front with high columns, etc.

Tex., Fort Worth.—Fort Worth Club has plans by Muller, Pollard & Leake, Fort Worth, for office and club building; 10 stories and basement; 50x100 ft.; fireproof construction; concrete-Barrett's specification roofing; vacuum steam heat; electric lighting; install gas engine and generator; 2 high-speed passenger elevators; cost (without mechanical equipment) \$255,000 to \$250,000; preliminary plans completed; working drawings ready about Mch. 1. (Lately noted.)

Tex., Jefferson.—Commercial National Bank of Jefferson is reported to erect bank building; 2 stories; pressed brick; 40x100 ft.; cost \$15,000.

Tex., Odem.—First State Bank, D. Odem, Pres., is reported to erect bank building; is receiving plans; brick construction.

Tex., Paris.—First National Bank opens bids Feb. 10 to erect 6-story steel-frame fireproof bank and office building (including mechanical equipment), according to plans and specifications by Griffith, Curtis & Flint,



Archts., Paris; cost \$115,000. (Previously noted.)

Tex., Paris.—Gibraltar Life Insurance Co., it is reported, selected site for office and hotel building. (See Hotels.)

Tex., Rosenberg.—C. B. Donley has plans for store and office building. (See Stores.)

Va., Richmond.—Manchester National Bank is reported to erect building at 11th and Hull Sts.

### CHURCHES

Ark., Harrison.—Presbyterian church will erect building to cost \$10,000.

Fla., DeFuniak Springs.—Presbyterian Church is reported to erect addition to auditorium; plans in progress. Address The Pastor.

Fla., Fort Pierce.—Building Com. of First Presbyterian Church is considering plans, etc., for building; probably tile or slate roof; cost (without mechanical equipment) \$8000. (Lately noted.)

Fla., Miami.—First Methodist Episcopal Church South receives bids until Feb. 5 through A. E. Lewis, Archt., Miami, to erect building; 90x90 ft.; 1 story and basement; reinforced concrete; tile roof. (Lately noted.)

Fla., West Tampa, Sta. Tampa.—First Presbyterian Church will erect church building. Address The Pastor.

La., Monroe.—Catholic congregation is having plans prepared by Smith & Barthel, Monroe, for spiral and finishing work on building.

La., New Orleans.—Church of St. Francis of Assisi, Rev. F. Chas. Brockmeier, pastor, has plans by Diboll, Owen & Goldstein, New Orleans, for building on State St. between Constance and Patton Sts.; 56x140 ft.; Gothic style; brick, reinforced concrete and stone; stone steps; seating capacity 700, exclusive of transepts to accommodate church societies; nave lighted and ventilated by clerestory windows; completion by Oct. 4; cost \$30,000.

Md., Baltimore.—Calvary Presbyterian Church, Rev. Francis S. Downs, pastor, 621 N. Kenwood Ave., is having plans prepared for building at McElderry St. and Linwood Ave.; cost \$20,000.

Miss., Natchez.—Rev. W. S. Long, Memphis, Tenn., is reported interested in erecting Christian Church.

Mo., St. Louis.—Central Presbyterian Church will expend \$3000 to alter building. Address The Pastor.

N. C., Durham.—Mangum Street Methodist Church, Rev. Coston J. Harrell, pastor, will erect building; cost (without mechanical equipment), \$5000 to \$8000; plans not made; construction about May 1.

N. C., Charlotte.—Knox Presbyterian Church has plans by Hook & Rogers, Charlotte, for building; Gothic style.

S. C., Rodman.—Pleasant Hill Methodist Church has plans by N. G. Walker, Rock Hill, for building.

S. C., Gaffney.—Limestone Baptist Church has plans N. G. Walker, Rock Hill, for building; cost \$10,000.

S. C., Rock Hill.—Baptist Church is having plans prepared by A. D. Gilchrist for building on E. White St.

Tenn., Cleveland.—Inman Street Baptist Church has plans by A. B. Baumann, Knoxville, for building at Central Ave. and Church St.; cost \$20,000.

Tex., Burnet.—First Christian Church will erect building on Main St. Address The Pastor.

Tex., Gouldbusk.—Congregations of M. E. church of Gouldbusk, Hardin, Rockwood and Fisk, Tex., plan to erect joint building at Gouldbusk. Address The Pastor.

Tex., San Saba.—Methodist church will open bids in about 2 weeks to erect building; 100x70 ft.; asbestos shingle roof; low-pressure steam heat; electric lighting; cost (without mechanical equipment) \$16,000; Fred G. Shaw, Archt., Tyler, Tex.; address proposals to H. E. Draper. (Lately noted.)

Va., Alexandria.—Second Baptist Church will erect building at King and Peyton Sts. Address The Pastor.

W. Va., Weston.—Building Com. Presbyterian Church opens bids about April 1 to erect building; 40x120 ft.; ordinary construction; slate roof; heating not determined; architect not selected; cost (without mechanical equipment), \$8000. (Lately noted.)

### CITY AND COUNTY

Ark., Harrison.—Jail.—Boone County Building Comm., W. S. Albright, Chrmn., will erect jail.

Fla., Tampa.—City Hall.—City accepted

plans by Bonfoey & Elliott, Tampa, for city hall. (Lately noted.)

Ga., Macon—Stockade.—City opened bids to erect addition to city stockade and barn; David Shaw is lowest bidder at \$2150. (Lately noted.)

Ga., Savannah.—Library.—City will erect Carnegie library; cost \$75,000. Address The Mayor.

Ga., Thunderbolt.—City Hall.—City has plans by J. deBruyn Kops, Savannah, Ga., for city hall; cost about \$3000; W. W. Almar, Mayor. (Lately noted.)

La., Hammond.—Jail and Fire Equipment. City voted \$5000 bonds for fire equipment and \$3000 for jail; Columbus Reid, City Secy. (Lately noted.)

La., New Orleans—Markets.—A. G. Ricks, Commr., receives bids until Jan. 29 to remodel St. Bernard and LeBreton Markets; plans and specifications at office of City Engr.

Md., Baltimore.—Health Department.—Board of Awards, Mayor Jas. H. Preston, Prest., will receive bids at office of Richard Gwinn, City Register, City Hall, until Jan. 28 for alterations and additions to old Polytechnic Institute Bldg. on Courtland St. near St. Elizabeth's Ct.; plans and specifications at office of Clarence E. Stubbs, Inspector of Buildings, City Hall. (Lately noted.)

Md., Salisbury.—Jail.—Wicomico County Commrs. will receive bids until Jan. 27 for work complete to erect jailer's residence and remodel jail building, installing toolproof cells, sanitary plumbing and heating; plans and specifications from D. B. Cannon, County Treas. and Clerk of Board of Commrs. (Previously noted to cost \$18,000.)

Mo., Fayette.—Library.—General Library Com. approved building committee's plans for library and directed said committee to select architect for building.

N. C., Concord—Jail, etc.—Cabarrus county, L. A. Weddington, Chrmn. Building Com., will let contract in Feb. to erect jail and addition to courthouse; fireproof; slate roof; electric lighting; cost \$20,000 and \$10,000, respectively; probably select architect Jan. 20. (Lately noted.)

Tenn., Chattanooga.—Fire Hall.—City, T. C. Betterton, Fire and Police Commr., has plans by James L. Snoddy for fire hall; 40x30 ft.; cost, without mechanical equipment, \$5000. (Lately incorrectly noted.)

Tex., Sherman.—Library.—City will expend \$20,000 to erect Carnegie library; reinforced concrete, brick and stone; Jno. Tulloch, Archt., Sherman; plans ready in 2 weeks. (Lately noted.)

Tex., Wichita Falls.—Hospital.—City and Wichita County Commrs. are considering sites for proposed joint city and county hospital; cost \$30,000, including site, building and equipment.

Va., Norfolk—Armory.—Board of Control will receive bids until Jan. 27 for material and erection of armory for Norfolk Light Artillery Blues on Myers Ave., Lamberts Point; cost \$37,000; plans and specifications prepared by B. F. Mitchell, Norfolk, on file at office of Brown & Lehman, Associate Archts. (Previously noted.)

Va., Roanoke—City Offices.—City votes March 3 on \$150,000 to erect office building and courthouse to cost \$250,000; C. B. Moomaw, Mayor. (Previously noted.)

### COURTHOUSES

N. C., Concord.—Cabarrus county, L. A. Weddington, Chrmn. Building Com., will let contract in Feb. to erect addition to courthouse, etc.; lately noted. (See City and County.)

Tex., Falfurrias.—Brooks county will vote Feb. 14 on \$68,000 bonds to erect courthouse. Address County Commrs.

Va., Roanoke.—City votes March 3 on \$150,000 bonds to erect courthouse and office building to cost \$250,000; C. B. Moomaw, Mayor. (Roanoke county previously noted to erect building.)

### DWELLINGS

Ala., Andalusia.—J. W. Shreve will erect colonial dwelling; about 12 rooms; porch and terrace; tile and reinforced concrete; Ionic exterior; cost about \$12,000; C. Frank Galliber, Archt., 425 Bell Bldg., Montgomery, Ala.

Ala., Birmingham.—S. H. Burke will erect residence at 2 Milner St.; two story; frame; cost \$4000.

Ala., Birmingham.—American Finance & Bond Co., 701 American Trust Bldg., will promote building of several dwellings in Brandywine townsite. (See Land Developments.)

Ala., Ensley.—J. R. Boggs is reported to erect two-story frame residence; cost \$3000.

Ala., Selma.—St. Paul's Episcopal Church has not determined details for erecting rectory, etc.; lately noted. (See Miscellaneous.)

D. C., Washington.—C. H. Tompkins, 1883 3d St. N. W., will expend \$7000 to erect residence; 21x60 ft.; ordinary construction; Kendall & Smith, Archts., Southern Bldg., Washington. (Lately noted under Stores.)

D. C., Washington.—Harry A. Kite, 1333 G St. N. W., has plans by A. E. Landvoigt, 1338 G St. N. W., Washington, for 8 two-story dwellings at 312-16 Tennessee Ave. N. E.; cost \$30,000.

D. C., Washington.—J. S. Gruver, Union Trust Bldg., has plans by W. R. Talbott, 1314 F St. N. W., Washington, for 6 two-story dwellings in 3900 block Ingomar St., 3900 block Kanawha St. and at 3316 Jenifer St.; cost \$33,000; construction by owner.

Fla., Clearwater.—J. B. Paine will erect residence; 2 stories and basement; hot-air heat.

Fla., Daytona.—Theodore Hofstatter is reported to have purchased 3 lots and to erect dwellings.

Fla., Fulford.—E. L. Jordan, Long Beach, Cal., will erect 6-room bungalow.

Fla., Jacksonville.—J. O. Chambliss will erect 2-story frame residence; cost \$9000.

Fla., Jacksonville.—J. W. Hill will erect 2-story frame residence; cost \$2250.

Fla., Jacksonville.—Herman Rehm will erect 2-story frame residence; cost \$6500.

Fla., Jacksonville.—S. C. Harrison, Sr., will erect 2-story frame residence; cost \$3500.

Fla., Jacksonville.—T. F. Davis will erect 8 dwellings on Spruce St. and 9 on Minnie St.; 1 story; cost \$7500.

Fla., Leesburg.—Will H. Gevedon will erect residence.

Fla., Jacksonville.—C. S. Hatchett will erect 2-story frame dwelling on Myra St.; cost \$3250.

Fla., Tampa.—Philip F. Licata will expend \$1200 each (without mechanical equipment) to erect 3 dwellings; 51x23 ft.; mill construction; metal roof; electric lighting, costing \$25 each; cement walks costing \$40 each; day labor. (Lately noted.)

Ga., Albany.—Morris W. Tift will erect 1-story brick-veneer residence; cost \$4600 to \$5000; is receiving bids; will also erect \$18,000 cottage, for which plans are prepared.

Ga., Americus.—W. E. Warlick is reported to erect several cottages.

Ga., Cuthbert.—C. B. King is reported to erect additional cottages.

La., New Orleans.—R. C. Jordan, Supt. of Stuyvesant Docks, Illinois Central R. R., is reported to erect residence.

La., New Orleans.—Andrew Miller is reported to erect bungalow at Octavia and Robertson Sts.

Md., Easton.—O. H. Benson and Thos. H. Sewell are reported as to erect residences.

Mo., St. Louis.—W. A. Reed will erect two 1-story dwellings at 5783-74 Goodfellow St.; cost \$5000.

Mo., St. Louis.—Monroe Construction Co. will erect 5 one-story dwellings at 4850-70 Carter St.; cost \$10,000.

Mo., St. Louis.—Itan Investment Co. will erect 12 two-story dwellings at 4821-59 Milentz St.; cost \$30,000.

Mo., St. Louis.—A. G. Pasquier will erect dwelling on Aberdeen Pl.; cost \$10,000.

Mo., St. Louis.—Frank C. Mueller, 2142 Nebraska Ave., will erect 7 dwellings; 24x50 ft.; ordinary construction; composition roof; hot-air heat; cost (without mechanical equipment) \$3500 each; plans and construction by owner. (Lately noted under Apartment-houses.)

Mo., St. Louis.—Walter W. Candy is having plans prepared by Wm. D. Crowell of Mauran, Russell & Crowell, St. Louis, for Italian villa style residence; 12 rooms.

Mo., St. Louis.—Wm. Straub will erect 2-story dwelling at 2329 Montgomery St.; cost \$3500.

Mo., St. Louis.—Charles Muerl will erect 11 one-story dwellings at 3707-47 S. Spring St.; cost \$27,500.

Mo., St. Louis.—R. C. Hudler will erect 2 dwellings. (See Apartment-houses.)

Mo., University, Station St. Louis.—M. Gugerly has plans by Wm. P. McMahon for brick dwelling in West Portland Pl.; 25x40 ft.; cost \$9000; construction by owner.

Mo., Webster Groves.—New Helfenstein Park Co. will erect 10 dwellings; hardwood floors and finish; hot-water heating plant; cost \$8000 to \$10,000 each; J. H. Farish & Co. will superintend construction.

Mo., Webster Groves.—Walter Scott Realty Co. will erect 25 California-type bungalows to cost \$3500 to \$5000 each.

N. C., Charlotte.—Dr. Brodie C. Nalle has plans by Hunter & Gordon, Charlotte, for residence; colonial type; brick.

N. C., Gastonia.—L. F. Groves is having plans prepared by Louis H. Asbury, Charlotte, for dwelling; 9 rooms.

N. C., Raleigh.—W. F. Utley will erect residence on Lenoir St.; cost \$4000.

N. C., Raleigh.—E. J. Glalock will erect \$3000 residence on Cutler St.; cost \$3000.

N. C., Raleigh.—A. F. Guirkin will erect 2 residences on Cutler St.; 7 rooms; cost \$3500.

S. C., Charleston.—D. C. Barbot, Archt., 26 Broad St., will erect dwelling on Blvd.

S. C., Richburg.—W. S. Martin has plans by N. G. Walker, Rock Hill, for residence; cost \$10,000.

S. C., Walhalla.—R. T. Janes will erect residence.

Tenn., Knoxville.—T. D. Morris will erect dwelling at White Ave. and 9th St.; cost \$3000.

Tenn., Memphis.—H. H. Higbee, 207 Central Bank Bldg., will expend \$3000 (without mechanical equipment) to erect dwelling; ordinary or mill construction; shingle roof; hot-air heat, costing \$200; electric lighting, costing \$125; construction by owner. (Lately noted to erect 2 dwellings.)

Tenn., Memphis.—E. F. Geers will erect residence and garage at 1598 Carr Ave.; cost \$7700.

Tenn., Memphis.—H. C. King will erect 2 residences at 1595 and 1605 Netherwood St.; cost \$4000.

Tex., Dallas.—W. E. Burnes will erect 8-room frame cottage at 3002 S. Boulevard; cost \$3200.

Tex., Dallas.—F. H. Lawrence will erect 7-room brick-veneer residence at 202 N. Montclair St.; cost \$4000.

Tex., Dallas.—Miss Nannie Stroud will erect 6-room frame cottage at 311 N. Wilomet St.; cost \$3000.

Tex., Dallas.—J. P. Clark will erect 9-room 2-story frame residence at 2639 Grand St.; cost \$3150.

Tex., Dallas.—W. E. Bonner will erect 6-room frame cottage at 3818 Rawlins St.; cost \$3200.

Tex., Dallas.—E. L. Lawrence will erect four 5-room frame cottages on Storey St.; cost \$4800.

Tex., Dallas.—Thos. B. Love will erect 6-room addition to building at 3811 Cole St.; cost \$3000.

Tex., Dallas.—J. L. Hooper will erect 9-room 2-story frame cottage at 302 S. Wilomet St.; cost \$4000.

Tex., El Paso.—W. A. M. Roxby will erect residence in Grand View addition.

Tex., El Paso.—Geo. W. Beaudette will erect bungalow at 1919 E. Boulevard; cost \$3000.

Tex., El Paso.—Perry Kirkpatrick will erect building for stores and living rooms. (See Stores.)

Tex., Luling.—A. B. Jackson is reported as to erect residence.

Tex., Pleasanton.—Methodist Church will erect parsonage. Address The Pastor.

Tex., San Antonio.—John M. Taylor will erect 2-story dwelling on Mulberry St.; cost \$4000.

Tex., San Antonio.—R. N. Martindale will erect 2-story brick and concrete residence on King's Highway; cost \$16,000.

Va., Crozet.—Lacy Rea has plans by J. C. Jones, Waynesboro, Va., for bungalow; cost \$8000.

Va., Richmond.—Moses I. Binswanger will erect dwelling; 2 stories and attic; cost \$15,000.

Va., Richmond.—Henry A. Maurice will rebuild burned residence.

Va., Richmond.—Davis & Archer will erect 3 dwellings on West St.; cost \$10,000.

Va., Richmond.—Jas. W. Gentry will erect 2-story frame dwelling on 8th St.; cost \$3200.

Va., Edgewater (not a postoffice).—P. S. Huber, 1709 Granby St., Norfolk, has plans by H. Abrams, 246 Arcade Bldg., Norfolk, for dwelling; 30x51 ft.; brick; 2 stories; cost of heating and plumbing, \$700; slate roof; cost of building without mechanical equipment, \$6300.

W. Va., Parkersburg.—L. N. Pickens is reported to erect 2 dwellings on Central Ave.

## GOVERNMENT AND STATE

Ark., Batesville—Postoffice.—Custodian of Postoffice will receive bids for miscellaneous repairs and painting at postoffice; information from custodian.

Ark., Little Rock—Postoffice.—Jack Walker, custodian, states \$5000 will be expended in repairs to postoffice building, including painting, etc. Lately noted to receive bids until Jan. 10.)

Ark., Searcy—Postoffice.—Treasury Dept., Oscar Wenderoth, Supervising Archt., Washington, D. C.—Bids until Feb. 28 to erect (including mechanical equipment, interior lighting fixtures and approaches) of postoffice; one story, mezzanine and basement; stone and stucco-faced building; 3800 sq. ft. ground area; non-fireproof except first floor; slate roof; drawings and specifications obtainable from custodian at site or at this office, at discretion of Supervising Archt. (Previously noted.)

Ga., Savannah—Postoffice Repairs.—Postmaster Marion Lucas will receive bids until Feb. 12 for improvements and remodeling postoffice, including repairs to stone and concrete work, roofing, windows, floors, chair-boardings, cleaning, scraping and repainting walls, etc.; cost \$12,000. (Lately noted.)

Ky., Louisville—Substation Postoffice.—Tobe Greiner Building & Contracting Co. submitted blueprints of plans of postoffice substation at 4th and A Sts.; cost about \$7500; E. T. Schmitt, postmaster.

Tenn., Bolivar—Hospital.—Trustees of Western Hospital for Insane, D. W. Parran, Chrmn., receive bids until Feb. 3 to erect 3-story brick addition to hospital; plans and specifications at office of R. A. Heavener, Archt., Jackson, Tenn.

## HOTELS

Ala., Birmingham.—American Finance & Bond Co., 701 American Trust Bldg., will promote building of hotel. (See Land Developments.)

Fla., Daytona.—City Hotel Co., H. C. F. Lohm, Secy. and Mgr., selected builder and lets contract Feb. 1 to erect first wing of 200-room hotel; 6 stories; fireproof; Talley, Sumner & Hamilton, Archts., Jacksonville. (Previously noted to cost \$75,000.)

Ga., Atlanta.—Piedmont Hotel Co. purchased unexpired lease of Piedmont Hotel; is reported to expend about \$100,000 for improvements; will provide 80 to 90 additional rooms and install baths.

Ga., Macon.—T. W. Hooks will expend \$10,000 for improvements to Hotel Lanier, including plumbing, heating, etc.; install tubular boiler and 2 (Otis) elevators; holding cost within \$15,000 or \$20,000. (Lately noted.)

Ga., Macon.—Leon S. Dure has plans by Curran R. Ellis, Macon, for hotel at Broadway and Mulberry St. to replace burned structure; 4 stories and basement; fireproof; brick, concrete and steel; 126 rooms, about 63 of which will have private baths; electric elevators; completion about Sept. 1. (Lately noted.)

Miss., Richton.—John MacDonald and others are interested in plan to erect hotel; 2 stories; brick and stone; tile floor; cost \$18,000.

Miss., Philadelphia.—Dr. D. J. Rush and R. Stribling will rebuild hotel, store and office buildings. (Lately reported burned.)

N. C., Wilmington.—King & Seigler, 204 Princess St., will not erect hotel at Wrightsville Beach, as lately reported.

Tenn., Tate Springs.—Tate Springs Hotel Co., S. B. Allen, Mgr., is reported to have increased capital stock from \$50,000 to \$400,000 and to erect 100-room hotel to cost \$100,000; also to have leased 3500-acre tract for development.

Tex., Galveston.—Louis B. DeRango will erect hotel; 125x40 ft.; mill construction; shell roofing; individual gas heaters; electric lighting; cost \$5500; Stowe & Stowe, Archts., Galveston; construction by owner. (Lately noted under Dwellings.)

Tex., Paris.—Gibraltar Life Insurance Co. is reported, selected site for hotel and home office building; not less than 6 stories.

## MISCELLANEOUS

Ala., Birmingham.—Sanitarium.—Lyndhurst Cottage Sanitarium, Dr. A. C. Watts, owner, R. F. D. No. 7, will erect ten 2-room cottages for tuberculosis patients; cost without mechanical equipment, \$150 each; ordinary construction; composition roof; stoves; electric (private plant already installed) lighting; date of opening bids not set; lately noted. (See Machinery Wanted.)

Ala., Selma.—Parish House.—St. Paul's Episcopal Church has not determined details for erecting parish house and rectory. (Lately noted to cost \$15,000.)

D. C., Washington.—Clubhouse.—R. L. Montague, 503 7th St., will erect clubhouse at 1212 4th St. N. E., for Monticello Social Club, 4th and N Sts. N. E.; 3 stories; frontage 20 ft.; tapestry brick; iron marquise in front; cost \$10,000; Hunter & Bell, Archts., 1421 H St. N. W., Washington.

D. C., Washington.—Clubhouse.—Montgomery Country Club will erect clubhouse in Bradley Hills section; old English style; one story; tower effect in parts; brick and frame; about 100x50 ft.; Clarke Waggaman, Archt., 1120 Connecticut Ave. N. W., in collaboration with J. H. de Sibour, Hibbs Bldg., both of Washington. (Previously noted.)

Fla., Fulford.—Clubhouse.—Community Club will erect clubhouse; 2 stories; concrete.

Fla., Sarasota.—Clubhouse.—Sarasota Woman's Club has plans by H. N. Hall for combination clubhouse and library at Palm and Park Aves.; will organize holding company with \$5000 capital. (Lately noted.)

Fla., St. Augustine.—Grandstand.—Baseball Comm. will soon let contract to erect grandstand at St. Augustine Baseball Park; Secy. of Chamber of Commerce may furnish information.

Fla., St. Petersburg.—Skating Rink.—E. M. Cooper will erect 52x160-ft. skating rink.

Ga., Savannah.—Settlement-house.—Jewish Educational Alliance will call for bids in about 2 months to erect building; probably 3 stories; cost \$50,000 to \$75,000; H. W. Witcover, Archt., National Bank Bldg., Savannah. (Previously noted.)

La., Lake Charles.—Orphanage.—Louisiana Baptist Orphanage, J. N. Shealy, Supt., will erect addition to building; 32x40 ft.; cost (without mechanical equipment) \$7000 to \$10,000; probably metal roof and vapor heat; cost of sidewalks \$1200; J. C. Carter, Archt.; date of opening bids not set.

Md., Baltimore.—Restaurant.—Nicholas Sakelos, 306 E. Baltimore St., has plans by Frank & Kavanaugh, 328 N. Charles St., for improvements to building at 308 W. Baltimore St. for Olympia Lunchroom; will lower first floor to level of street, provide new front, fixtures, etc.; cost \$15,000; contractors estimating are: Singer-Pentz Co., 600 Equitable Bldg.; Henry S. Ripple, 7 Clay St.; Fidelity Construction Co., 64 Knickerbocker Bldg.; John K. McIver, 7 Clay St.; J. S. Busick, 2811 Rayner Ave.; Milton C. Davis, 15 E. Fayette St.; Edward Watters & Co., 509 N. Charles St., all of Baltimore. (Lately noted.)

Mo., Kansas City.—Hospital.—Christian Church Hospital Assn. is receiving bids, to Church Hospital Assn. will erect 4-story fireproof hospital; cost \$200,000; Henry F. Hoyt, Archt., 315 E. 10th St., Kansas City; bids opened Jan. 22. (Previously fully described.)

Mo., Webster Groves.—Home.—Congregational Church will erect community home to cost about \$35,000. Address The Pastor.

Tenn., Chattanooga.—Clubhouse.—Mountain Club Holding Co., Incptd. by M. Chamberlain, Gaston C. Raoul, C. C. Nottingham, G. T. Hunter and Thayer Montague, is having plans prepared by D. V. Stroop, James Bldg., Chattanooga, for clubhouse on Signal Mountain; rustic timberwork; 2 wings, one to contain ladies' lounging room and buffet kitchen, other to contain men's lounging room; building will also have dance hall, verandas, etc.; cost about \$4000.

Tenn., Memphis.—Clubhouse.—Chas. E. Speer, Secy., Colonial County Club, states tentative plans only have been made for clubhouse; is constructing golf course. (Lately noted to cost \$100,000.)

Tenn., Memphis.—Hospital.—Methodist Episcopal Church South, H. M. Ellis, Field Secy., 2086 Union Ave., will select architect in few weeks to prepare plans for hospital. (Previously noted to cost \$200,000.)

Tex., Decatur.—Fair.—Wise County Fair Assn. Comm., L. H. Reeves and others, purchased site and will erect fair buildings.

Tex., Fort Worth.—Clubhouse.—Fort Worth Club has plans for club and office building; 10 stories and basement; 50x100 ft.; lately noted. (See Bank and Office Buildings.)

Tex., Houston.—Parish-house.—Maurice Sullivan and Sanguinet, Staats & Gottlieb, Houston, prepared plans for parish-house for Father Walsh; cost \$14,000.

Tex., Houston.—Home.—Women's Baptist Missionary Society of Houston will erect industrial home and day nursery on Gano St. between Lorraine and Harrington Aves.; 2 stories; concrete; cost \$7500; will accommodate about 50 children; Miss Anna Sykes will be in charge.

Tex., Lockhart.—Hospital.—Drs. N. B. Coopwood, A. A. Ross, Morgan O'Banion and Smith will erect hospital; 44x66 ft.; 2 stories and basement; fireproof; metal tile roof; steam heat; cost of elevator, \$750; cost of building without mechanical equipment, \$12,500; J. R. Eeds, Archt., Lockhart. (Lately noted.)

## RAILWAY STATIONS, SHEDS, ETC.

Fla., Jacksonville.—Florida R. R. Com., Tallahassee, Fla., directed Jacksonville Terminal Co., J. C. Blanton, Mgr., to begin construction of union passenger station by July 15, 1915; plans are said to include waiting-rooms containing, respectively, 11,869 and 5625 sq. ft. floor space; ticket lobby to have 4160 sq. ft. floor space; restrooms and smoking-rooms to contain, respectively, 979, 1120, 396 and 396 sq. ft. floor space; concourse to have area of 19,860 sq. ft.; car sheds, walks, approaches, train gates, etc.; reported cost about \$500,000. (Previously noted.)

Fla., Pensacola.—Guif, Florida & Alabama R. R., G. A. Berry Chief Engr., is reported to erect warehouses and provide storage yards.

Ga., Griffin.—Central of Georgia Ry., C. K. Lawrence, Chief Engr., Savannah, will erect passenger station.

Ga., Savannah.—Savannah Electric Co., H. C. Foss, Gen. Mgr., is reported to rebuild car barn at Winnett and Harman Sts. at cost of \$50,000; 2 sections to be built this year and another section next year; brick construction, divided by several brick fire walls; tar and gravel roof; skylights and windows of wire glass; accommodations for 160 cars; 18 sets of track; switches and special work.

N. C., North Wilkesboro.—Southern Ry. Co., B. Herman, Chief Engr., 1300 Pennsylvania Ave., Washington, D. C., contemplates rebuilding station; arrangements not made. (Lately reported burned.)

N. C., Newton.—Southern Ry. Co., B. Herman, Chief Engr., Washington, D. C., is reported as having plans prepared for freight and passenger depots; will remodel old structure into freight depot.

## SCHOOLS

Ala., Birmingham.—American Finance & Bond Co., 701 American Trust Bldg., will promote building of school. (See Land Developments.)

Ala., Mobile.—Richard Hines, Jr., Secy. Board of School Comms., states \$150,000 will be expended for school improvements, including sites; will erect new Russell school, 14 rooms and auditorium, costing \$35,000; Raphael Semmes School, 12 rooms and auditorium, costing \$25,000; 8-room grammar school on old shell road, costing \$15,000; remodel Barton Academy, 32 rooms, at cost of \$58,000; Stevens & Nelson, Archts., New Orleans. (Lately noted.)

Ark., Harrison.—Harrison School Dist. will erect ward school; cost (without mechanical equipment) \$8000; 65x70 ft.; ordinary construction; metal roof; hot-air heat costing \$400; T. W. Johnson, Archt.; address proposals to A. B. Andrews; lately noted as issuing \$10,000 bonds to erect school in Eagle Heights Addition. (See Machinery Wanted.)

Ark., Searcy.—J. M. Williams, Calloway College, states no new building will be erected during present year; probably erect two buildings within 2 years, domestic science hall to cost \$10,000 to \$15,000, and building for general classrooms, libraries and laboratory, costing \$40,000 to \$50,000; plans and specifications not yet made. (Lately noted.)

D. C., Washington.—Rev. Wilbur F. Crafts of International Reform Bureau, 206 Pennsylvania Ave. S. E., is reported as to be president of holding company being organized to erect building at 2d St. and Pennsylvania Ave. S. E. for school to educate secretaries of Government officials; 8 stories; colonial style; crescent shape front; tower at one corner; 300 rooms for rooming facilities for students; classrooms and lecture-room on first floor; moving-picture apparatus will be installed; minimum cost, \$200,000.

Fla., Arcadia.—De Soto County Board of Public Instruction, F. B. McClelland, Chairman, receives bids until Feb. 16 to erect high school; separate bids received for work and material on mason work, carpenter work, roofing and sheet metal, painting, plumbing and electrical work; plans and specifications on file at offices of Jas. O. Bickley, Supt., and Francis J. Kennard, Archt., American National Bank Bldg., Tampa, Fla. (Previously noted.)

Fla., Fort Pierce.—St. Lucie County Board of Public Instruction has plans by W. B. Camp, Jacksonville, for school building; 395

ft., with depth of 165 ft. to rear of auditorium; auditorium 100 ft. deep, and have 2 stories, amphitheater style; seating capacity of 1200; 2 wings, each 30x60 ft.; exterior of pressed brick, with white cement trimmings; dark red tile roof; steam heat; electric lights; sanitary plumbing; cost about \$75,000; bids opened Feb. 16; R. R. Gladwin, Chrmn. of Board. (Lately noted.)

Fla., Gainesville.—Board of Control of State of Florida, P. K. Yonge, Chrmn., will receive bids at Windsor Hotel, Jacksonville, until Feb. 9 for construction and heating of law building at University of Florida; separate bids; drawings and specifications at office of W. A. Edwards, Archt., 632 Candler Bldg., Atlanta; Prest. A. A. Murphree, University of Florida, Gainesville, and Builders' Exchange, Atlanta.

Fla., Palatka.—Putnam County Board of Public Instruction plans issuing \$75,000 to \$100,000 bonds to erect schools; J. D. Cottingham, County Supt. of Public Instruction.

Fla., Palatka.—Palatka Business College, G. W. Land, Prest., will erect school building and probably dormitory.

Fla., Starke.—Bradford County School Board, L. W. Kicklighter, Chrmn., will expend (without mechanical equipment) \$50,000 to erect school; 75x130 ft.; ordinary construction; tile and composition roof; steam heat, costing \$2500; Talley & Sumner, Archts., Jacksonville. (Lately noted to receive bids until Feb. 9.)

Ga., Brunswick.—Selden Institute will receive bids to erect school building.

Ga., Moultrie.—City voted bonds to erect school to cost at least \$30,000; Geo. R. Kline, Mayor. (Previously noted.)

Ky., Bethen.—Town voted bonds to erect graded school, for which plans have been prepared and bids will soon be received.

Ky., Lexington.—Transylvania University Executive Com. rejected all bids to erect dormitory; 3 stories and basement; brick; stone foundation; accommodations for 127 students. (Lately noted.)

Ky., Louisville.—Board of Education is having plans prepared by J. Earl Henry, Archt. for board, for Academic High School at Brook and Breckinridge Sts.; fireproof; brick; stone trimmings; capacity for 1500 students; cost \$250,000. (Lately noted.)

La., Choudrant.—Lincoln Parish School Board, T. A. Green, Supt. of Schools, engaged Smith & Barthel, Monroe, La., to prepare plans for brick school building; cost \$7000.

La., Hammond.—City voted \$50,000 bonds to erect school; 10 or 12 rooms and auditorium; practically fireproof; C. Reid, City Secy. (Lately noted.)

La., Turkey Creek.—Evangeline Parish School Board, J. C. Veirine, Prest., Ville Platte, La., will erect \$6000 school.

La., Vinton.—Calcasieu Parish School Board, F. M. Hamilton, Secy.-Treas., receives bids until Feb. 10 to erect 2-story 17-room brick school building; plans and specifications obtainable from A. H. Humphrey, Archt., Lake Charles, La.; heating, plumbing and electric wiring separate contracts. (Previously noted.)

La., Vivian.—School Board is reported planning to erect school building; fireproof; cost \$40,000.

Md., Baltimore.—Loyola College, Rev. Wm. J. Ennis, Prest., Calvert, Madison and Monument Sts., is negotiating for site at Guilford for college buildings; Maginnis & Walsh, Archts., 100 Boylston St., Boston, Mass.

Miss., Liberty.—Anite County Board of Supervisors is considering \$12,000 bond issue to erect agricultural high school.

Miss., Una (not a postoffice).—J. T. McKinney, Secy. Board of School Trustees, Prairie, Miss., R. F. D. No. 2, receives bids until Jan. 31 to erect school for Una Separate School Dist.

N. C., Raleigh.—Raleigh township defeated \$50,000 bonds for schools. (Lately noted.)

N. C., Holly Springs.—Wake County Commissioners, C. H. Anderson, Register of Deeds and clerk ex-officio, Raleigh, ordered election for Feb. 17 on \$10,000 bonds to enlarge and equip high school. (Lately noted as to vote Feb. 20.)

Tenn., Camden.—City is reported considering erecting school. Address The Mayor.

Tenn., Chattanooga.—City has plans by Snoddy & Bull, Chattanooga, for additions to high school; fireproof; composition roof; heating plant installed; cost (without mechanical equipment) \$10,000; date of opening bids not set. (Lately noted appropriating \$10,182.91 for addition to building.)



Tenn., Copperhill.—Polk County Comms., Benton, Tenn., will erect high school; probably brick construction; slate roof; cost of heating plant, \$1500; cost of building without mechanical equipment, \$15,000; architect not employed. (Lately noted at Tenn., Benton, as voting \$24,000 bonds to erect school.)

Tex., Bishop.—School Board opens bids about Feb. 1 to erect school; 80x100 ft.; fireproof; cost (without mechanical equipment) \$50,000; tar and gravel roof; Hero heaters; W. J. Ehlers, Archt., Bishop. (Lately noted to erect schools provided for in \$75,000 bond issue.)

Va., Bristol.—City is reported to advertise about Feb. 1 for bids to erect high school Piedmont Ave.; 225x165 ft.; 2 stories and basement; Roman Ionic style architecture; rough texture brick, stone and terra-cotta; stairways and corridors fireproof; combination fan and steam heating and ventilating; corridor floors of terrazzo; 10 classrooms; auditorium, seating capacity 1200; gymnasium, shower baths, laboratories, etc.; terraced approaches; cost of building and site, \$60,000 to \$75,000; Clarence B. Karfott, Archt., Galloway Bldg., Bristol, Tenn. (Lately noted.)

Va., Lynchburg.—Randolph-Macon Woman's College, Wm. A. Webb, Prest., will erect auditorium and office; cost \$60,000; definite plans not made. (Lately noted.)

W. Va., Huntington.—Board of Education is considering \$300,000 to \$400,000 bond issue to erect high-school and additional ward buildings.

W. Va., Parkersburg.—Board of Education, Geo. D. Heaton, Secy., is having plans prepared by Frank L. Packard, Columbus, O., for high school; fireproof; cost (without mechanical equipment) \$25,000; details not determined. Address Mr. Heaton.

W. Va., Williamson.—Board of Education, W. S. Rosenheim, member, is receiving bids and will let contract Feb. 2 to erect 7-room addition to school building and install heating plant; addition to include assembly-room, classrooms, laboratory, etc.; also install ventilating system.

## STORES

Ala., Andalusia.—C. Frank Galliber, 425 Bell Bldg., Montgomery, Ala., is preparing plans for store building; 2 stories; plate glass; offices on 2d floor; cost \$5000.

Ala., Birmingham.—American Finance & Bond Co., 701 American Trust Bldg., will promote building of several stores. (See Land Developments.)

Ala., Birmingham.—W. B. Colby Decorating Co. will consolidate with Northern company and act as Southern representative; will erect building; 5 stories; Gothic facade; Gothic windows; first story below street level and have floor of Ludowici or Welsh Quarry tile; Caen stone walls; beamed ceiling; Italian renaissance style; no floor between 4th and 5th stories, this combined space to have paneled walnut woodwork, and glass cases in Elizabethan design will extend around room to height of 1 story, with Caen stone above that; mansard ceiling almost entirely of glass, supported by Gothic piers and buttresses.

Ala., Birmingham.—W. H. Gillespy will erect additions to building on 12th Ave. between 15th and 16th Sts.; cost \$5000.

Ala., Birmingham.—P. C. Kiker will erect 2-story brick veneer building on 14th Ave.; cost \$8000.

Ala., Birmingham.—Arnold Lumber Co. will erect 2-story brick building at Ave. B and 30th St.; cost \$3000.

Ala., Birmingham.—John G. Farley will install 2 elevators at 20th St. and 3d Ave.; cost \$9000.

Ark., Harrison.—T. S. Capps and J. N. Paul will erect business buildings.

D. C., Washington.—National Union Temple Assn., Chas. F. Haden, 4309 Kansas Ave., Prest., has plans for store, office and lodge building. (See Association and Fraternal Bldgs.)

Fla., Jacksonville.—O. T. Kimble will erect 2-story brick building; cost \$9000.

Fla., Punta Gorda.—Dr. E. E. Welch of Eaton, O., will erect brick business building on Marian Ave.

Fla., Zolfo.—Roberts Bros. will erect brick business block to include Masonic Hall on second floor.

Ga., Albany.—Territorial Hotel Co. (L. E. Gortatowsky, E. H. Kalmon and others) is reported receiving bids to erect business block; 4 stories; 25x80 ft.; brick; 1 story plate-glass and press-brick front; metal ceilings; composition roof; cost \$8000; H. E. Nash, Archt., Albany.

Ga., Americus.—Eastlin Bros., Anderson-

ville, Ga., are reported considering erecting mercantile and office building; W. C. Eastlin of Americus reported interested.

Ga., Atlanta.—C. C. McGhee will remodel building; cost \$5000; construction under supervision of Guide & Co.

Ga., Atlanta.—C. J. Kamper leased building at Peachtree and Linden Sts. and will install equipment for retail grocery and market.

Ga., Atlanta.—W. D. Luckie Lodge, A. F. and A. M., will erect store, lodge and office building. (See Association and Fraternal.)

Ga., Atlanta.—Otis & Holliday are reported to erect store and apartment building. (See Apartment-houses.)

Ga., Atlanta.—Reuben R. Arnold and Harvey Hill are reported to have plans for remodeling old city hall; stores on ground floor; offices on upper floors.

Ga., Haddock.—Jas. T. Finney contemplates rebuilding store. (Lately reported burned.)

Ga., Lagrange.—Edmondson-Christopher Co. opens bids in about 3 weeks to erect department store; 50x100 ft.; 2 stories and basement; concrete and mill construction; tar and gravel roof; steam heat; electric lighting; hand elevator; cost (without mechanical equipment) \$23,000; Walker & Chase, Archts., Atlanta. (Lately noted.)

Ga., Lagrange.—Pike Bros. are having plans prepared by Walker & Chase, Atlanta, for store building; 2 stories and basement; 50x100 ft.; concrete and mill construction; tar and gravel roof; steam heat; electric lighting; hand elevator; cost (without mechanical equipment) \$20,000; bids opened about Feb. 1; subcontracts to include heating, plumbing, glazing, etc.

Ga., Marshallville.—M. S. Ware will rebuild store; 35x65 ft.; brick; tin roof; hand-power elevator; cost \$5000; T. E. Dennis, Archt., Macon, Ga. (Lately reported burned.)

Ga., Pelham.—J. L. Hand is reported to erect mercantile and office building; 3 or 4 stories.

Ky., Jackson.—Chas. Terry, J. C. Hurst and T. M. Davidson are reported to erect business buildings.

Ky., Jackson.—J. S. Redwine will erect brick business block.

Ky., Louisville.—Starks Co. will remodel store, provide new front, mezzanine and balcony floor; contracts for mahogany and plate-glass fixtures let.

La., Alexandria.—Dr. C. Pierson, Abe Simon and Simeon Simon are reported to erect building to be occupied by Simon Bros.; Favrot & Livaudais, Archts., New Orleans.

Miss., Richton.—Jno. MacDonald and others are interested in plan to erect 5 to 9 brick buildings on Main St.

Md., Frederick.—Frederick Trust Co., Reno S. Harp, Prest., has plans by B. Evard Kepner, Frederick, for addition to building for store on first floor and apartments on 2 upper floors; storeroom to be 50 ft. deep and have frontage of 32 ft., making total frontage of 2 structures 56 ft.; construction to begin about April 1.

Miss., Philadelphia.—Dr. D. J. Rush and R. Stribling will rebuild store, hotel and office buildings. (Lately reported burned.)

Mo., Joplin.—Interstate Grocer Co. will erect building. Company wires Manufacturers Record: "Proposed building will be reinforced concrete; 127x163 ft.; 5 stories and basement. Address John W. McKecknie, Archt., Gloyd Bldg., Kansas City, Mo."

Mo., St. Louis.—Ralph W. Cole of Cornet & Zeibig agency is promoting erection of arcade building; 2 stories; investment \$75,000.

Mo., St. Louis.—American Five & Ten-Cent Store will expend \$5000 to alter stores at 523 Washington St.; cost \$5000.

Fla., Orlando.—Jos. L. Guerensy is reported to erect 4-story building; brick and steel; frontage 100 ft.

Mo., St. Louis.—Greenfield Bros. Clothing Co. acquired Catlin Bldg. and will remodel; install front, etc.; Isaac S. Taylor, Archt., St. Louis.

Mo., St. Louis.—Pufels Cloak Co. will expend \$4200 to alter store at 530 Washington St.

S. C., Columbia.—Wilson & Sompayrac, Archts., Columbia, prepared plans to remodel Malone's Music House, including new front, show windows, hot-water heating plant, hand-power freight elevators and installation of offices on second floor; bids received until Jan. 22.

S. C., Georgetown.—Georgetown Grocery Co. has plans by N. G. Walker for store building; cost \$25,000.

Tenn., Wartrace.—C. M. Dean will erect business block to contain 3 stores.

Tex., Abilene.—J. F. Kirkpatrick is reported to erect store building on Mott Place.

Tex., Dallas.—Edw. T. Harrison is reported to erect 3-story business building on North Harwood St.

Tex., Dallas.—Wood & Charlton will erect addition to building at 232 Elm St.; cost \$3500.

Tex., Dallas.—Chenoweth Bros. will expend \$7500 to erect 1-story brick building at 3603-4 Main St.

Tex., Dallas.—Kittle A. Shuford will erect 1-story brick building at 1404 Camp St.; cost \$4000.

Tex., Dallas.—G. C. Gates and associates are reported to have purchased site on Harwood St. between Bryan and San Jacinto Sts., and to erect business building; 2 stories.

Tex., Dallas.—Harry Harlan Produce Co., Harry J. Harlan, Prest., will be absorbed by new company, which will erect 3-story-and-basement building in July on Cadiz St. between Pearl and Harwood Sts.; brick; 75x90 ft.

Tex., El Paso.—Perry Kirkpatrick will erect building to contain store and living-rooms at Santa Fe and San Antonio Sts.; cost \$9000.

Tex., El Paso.—Commercial Building Co., A. W. Bittick, Mgr., Commercial National Bank Bldg., will erect bank, store and office building. (See Bank and Office.)

Tex., Floresville.—L. K. Nowierski, San Antonio, Tex., reported probably to erect business building; brick.

Tex., Galveston.—Garbade, Elband & Co. will expend \$20,000 to alter and repair building.

Tex., Lorraine.—W. L. Edmondson is receiving bids to erect store; 48x100 ft.; gravel roof; hot-air heat; grates on sidewalks; lately noted. (See Machinery Wanted.)

Tex., Rosenberg.—C. B. Donley has plans by L. S. Green, Galveston, Tex., for business building; 2 stories; brick; 50x120 ft.; pressed brick; lower floor for 3 stores; upper floor for offices; cost \$15,000. (L. S. Green lately noted as preparing plans for building.)

Tex., San Antonio.—Nat Lewis will erect 2-story building on W. Commerce St.; cost \$4500.

Va., Berkley, Station Norfolk.—Flora & Rawls are erecting building on Liberty St. between 18th and 19th Sts.; 2 stories; frame; cost about \$3500.

Va., Martinsville.—Piedmont Lodge, A. F. and A. M., will, it is reported, erect store and lodge building. (See Association and Fraternal.)

Va., Norfolk.—C. B. Cole is reported to erect brick business building.

## THEATERS

Ala., Dothan.—C. Frank Galliber, 425 Bell Bldg., Montgomery, Ala., is preparing plans for moving-picture theater; front of white glazed brick, white glazed terra-cotta and Georgia marble; marble vestibule; copper marquis; cost about \$10,000.

Ga., Atlanta.—Mrs. E. P. Black is reported as to rebuild B. F. Avery & Sons' warehouse reported burned at loss of \$125,000.

Md., Salisbury.—John H. Tomlinson and Robt. D. Grier are reported interested in organization of company to erect theater with offices on upper floors.

Mo., St. Louis.—Market St. Real Estate Co., 305 Wainwright Bldg., has plans by J. C. Biggs, 902 Fullerton Bldg., St. Louis, for theater; mill construction; construction by owner; all other contracts let. (Contract lately noted let to Mr. Biggs.)

N. C., Wilmington.—Howard & Wells are reported as probably interested in erection of vaudeville theater on Front St.

Tenn., Murfreesboro.—Crescent Amusement Co. of Nashville is reported to erect theater to cost \$15,000 to \$18,000.

Tenn., Murfreesboro.—Tony Sudekum, Nashville, Tenn., is reported as to erect theater to cost about \$15,000.

Tex., Laredo.—Deavours & Hughes will rebuild theater; 50x100 ft.; cost (without mechanical equipment) \$8000 to \$10,000; fireproof; concrete construction; natural gas stoves, costing \$150; Star Moving Picture Theater lately noted damaged by fire. (See Machinery Wanted.)

Va., Richmond.—M. L. Hofheimer, 3d and Broad Sts., will erect fireproof moving-picture theater on Broad St. near 2d St.; 33-ft. front; steam heat; electric lighting. (Lately noted.)

## WAREHOUSES

Fla., Pensacola.—Gulf, Florida & Alabama R. R. G. A. Berry, Chief Engr., is reported to erect warehouses. (See Railway Stations, Sheds, etc.)

Ga., Fitzgerald.—Standard Supply Co. is reported contemplating erecting warehouse.

N. C., Walnut Cove.—Piedmont Warehouse Co., capital \$20,000, incptd.; will erect warehouse to be managed by Hutcherson & Taylor.

S. C., Columbia.—Columbia Ry. & Nav. Co. is reported to erect warehouse at Grand landing; 200x80 ft.; 1 story; heavy timbers; corrugated iron roof.

Tex., Houston.—S. J. Westheimer will erect warehouse at Buffalo and Commerce Sts.; cost \$4000.

Va., Lawrenceville.—Co-operative Warehouse Co. of Lawrence organized with capital of \$10,000, half of which will be used to establish warehouse and remainder to build dry prizey.

## BUILDING CONTRACTS AWARDED

### APARTMENT-HOUSES

Mo., St. Louis.—J. MacFarland estate will erect 7 two-story tenements; cost \$30,000; Gustav P. Wuest, Archt., St. Louis; Duffner & Stecker, contractors, St. Louis.

Mo., St. Louis.—H. Hermann let contract to H. Meyer to erect 5 two-story tenements at 804-06 Milentz St.; cost \$21,000.

S. C., Charleston.—Charleston Fidelity Corp. let contract to Geo. A. Clayton, Charleston, to erect apartment, store and bank building; 36x100 ft.; ordinary construction; tin roof; gas radiators and grates; gas and electric lighting; cost (without mechanical equipment), \$18,700; J. D. Newcomer, Archt., Charleston. (Lately noted.)

Tenn., Knoxville.—Mrs. M. S. Murrain, 1202 W. Church Ave., let contract to J. H. Weigel, Sr., to erect apartment-house; 36x70 ft.; 7 rooms each; gravel roof; hot-air heat; electric lighting, costing \$200; cement sidewalks, etc., costing \$100; cost of building (without mechanical equipment), \$9500. (Lately noted.)

Tex., Galveston.—Valery E. Austin and others let contract to erect store and apartment building. (See Stores.)

### ASSOCIATION AND FRATERNAL

Ala., Huntsville.—Dallas Mills let contract to Gildwell Bros. to erect Y. M. C. A. building; cost \$10,000; Edgar L. Love, Archt., 1315 Jefferson Bank Bldg., Birmingham. (Lately noted.)

Miss., Meridian.—Scottish Rite Building Assn. let contract to Smith Construction Co., Athens, Ga., to erect building; 105x112 ft.; 2 stories and basement; stone exterior; terra-cotta trimmings; ordinary construction;

composition roof; steam heat; cost (without mechanical equipment) \$70,000; P. J. Krouse, Archt., Meridian. (Lately noted.)

S. C., Hartsville.—Hartsville Lodge, No. 173, A. F. and A. M., is reported to erect temple; 2 stories; lower floor for moving-picture theater; J. M. Lawton, contractor.

### BANK AND OFFICE

D. C., Washington.—Riggs Realty Co. let contract to Arthur Cowdell, Hibbs Bldg., Washington, to remodel 8-story office building at 15th and G Sts. N. W.; cost \$8000; Appleton P. Clark, Jr., Archt., 816 14th St. N. W., Washington.

Ga., Augusta.—Levering & Garigues, 552 W. 23d St., New York, have contract for 1200 tons of fabricated steel to be used in construction of building for Empire Life Insurance Co. of Atlanta, for which The Whitney Co., 1 Liberty St., New York, has general contract; plans by W. L. Stoddart, 30 W. 38th St., New York, call for structure 75x120 ft.; 16 stories; tile roof; electric elevator; steel construction; brick and terra-cotta; cost \$400,000. (Lately noted.)

Ga., Savannah.—J. Bernstein and J. Maril let contract to erect store and office building. (See Stores.)

La., Houma.—Bank of Terrebonne let contract to A. A. Bonvillani to erect bank building; 2 stories; brick and stone; cost \$15,000, including furnishings; Favrot & Livaudais, Archts., New Orleans, La.

S. C., Charleston.—Charleston Fidelity Corp. let contract to erect bank, store and apartment building. (See Apartment-houses.)

Tex., San Antonio.—Thos. F. Brady let contract to Westlake Construction Co., St. Louis,



to erect office and theater building; 8 stories; Mauran, Russell & Crowell, Archts., St. Louis. (Lately noted to erect office and store building.)

Tex., Sherman.—W. C. Eubank let contract to erect office and store building; lately noted. (See Stores.)

### CHURCHES

Ark., Helena.—First Methodist Church let contract to McClure-Kenny Construction Co., St. Louis, to erect lately noted building; slate roof; W. H. Cann & Co., Archts., St. Louis; address proposals to J. D. Hammons. (See Machinery Wanted.)

Fla., Jacksonville.—Main Street Baptist Church let contract to Long Contracting Co. to erect addition to building for Sunday-school; 3 stories and basement; brick and stone; first floor to contain assembly-room to seat 250, 8 classrooms, etc.; second floor, 6 classrooms; third floor, 6 classrooms; structure 46x70 ft.; accommodate 1000; cost \$35,000.

Mo., Ashland.—Ashland Church let contract to Chas. R. Fisher to erect building; brick; stone trimmings; electric lights from private plant; steam heat; complete sanitary system; will contain main auditorium, Sunday-school rooms, bathroom, toilet-room, etc.; cost \$10,000; Geo. T. Sasse, Archt.

Mo., Wellston.—West Cabanne Presbyterian Church let contract to Ranson Crawford Construction Co. to erect building; brick; cost \$14,000; J. N. Dunham, Archt.

S. C., Camden.—Catholic church will expend \$13,000 (not including mechanical equipment) to erect building; ordinary or mill construction; Spanish tile roof; lighting by city current; J. T. Comes, Archt., Pittsburgh, Pa.; subcontracts let to Doman Dozen Mfg. Co. for roof and sheet-metal work; H. J. Bossler Co., Columbia, S. C., plumbing; W. J. Sneed Lumber Co., mill work; heating contract will be let by Archt.; leaded-glass contract not let; building contract lately noted let to John J. Cain Construction Co., Columbia, S. C.

Tex., Kerrville.—Baptist church is reported to have let contract to Clemens & Abree, San Antonio, to erect building; gray brick; native stone trimmings; cost \$11,500; Henry T. Phelps, Archt., San Antonio.

### CITY AND COUNTY

Ala., Mobile.—Poor Farm.—Mobile County Commrs. let contract at \$14,985 to Jett Bros. Contracting Co., Mobile, to erect 1-story hollow tile and brick-veneer building at county poor farm and remodel basement of present structure for central heating plant of single pipe gravity type; 41x115 ft.; one story; ordinary construction; slate roof; cost of heating plant, \$3600; acetylene lighting from present plant; Hutchisson & Denham, Archts., 1-2 People's Bank Bldg., Mobile. (Lately noted.)

D. C., Washington.—Shelter Shed.—District Commrs. let contract to W. E. Mooney, 1420 New York Ave., N. W., to erect shelter shed for farmers' produce market on B St. between 10th and 12th Sts. N. W.; 45x55 ft.; metal uprights and corrugated galvanized roofing; eaves 10½ ft. clear of ground; cost \$12,000; Snowden Ashford, Municipal Archt. (Lately noted.)

Ga., Boston.—Library.—City is reported to have let contract to erect Carnegie library. Address The Mayor.

Tex., Dallas.—Fire Station.—City let contract at \$13,650 to J. Lee Jackson, Dallas, to erect Oak Cliff fire station at 10th and Tyler Sts. (Lately noted.)

### DWELLINGS

Ala., Birmingham.—A. F. McNeal let contract to A. M. Tharp, Birmingham, to erect residence; 2 stories; brick-veneer; cost \$6500.

D. C., Washington.—W. E. Van Deusen, 2460 Wisconsin Ave., has plans by and let contract to Rich Ough to erect 2 three-story dwellings in rear of 3287-S9 M St.; cost \$6000.

D. C., Washington.—Ernest G. Walker, 1406 G St. N. W., has plans by Reginald W. Geare, 1421 H St. N. W., Washington, for 3 two-story dwellings at 1924-28 Belmont Rd. N. W.; cost \$18,000; Wm. Todd, Contr., Southern Bldg., Washington.

Fla., Plant City.—S. D. Adelson let contract to Harry A. Chapman, Plant City, to erect 3 residences.

Fla., Sarasota.—O. J. Munsey let contract to N. C. Gibson, Sarasota, to erect 2-story 6-room residence.

Ga., Atlanta.—Mrs. A. L. Soper let contract to P. B. Hopkins to erect 2 one-story 5-room dwellings on May St.; cost \$3900.

Ga., Atlanta.—Frank M. Callaway let con-

tract to Fulton County Home Builders, Atlanta, to remodel residence at cost of about \$10,000.

Ga., Quitman.—D. G. Malloy, Prest. First National Bank, is reported to have let contract to erect residence; 2 stories; brick; English type.

Md., Baltimore.—Jas. C. Fenhagen of Robt. Garrett & Sons, Garrett Bldg., let contract to Willard E. Harn Co., 213 N. Calvert St., Baltimore, to erect residence at Guilford; 2½ stories; 42x45 ft.; brick; Laurence H. Fowler, Archt., 347 N. Charles St., Baltimore. (Lately noted.)

Miss., Glendora.—S. M. Jones let contract to Roy B. Noll, Memphis, Tenn., to erect dwelling; cost, including equipment, \$15,000; without equipment, about \$12,000; 75x65 ft.; frame; shingle roof; hot-water heat; independent electric plant; granolithic sidewalks; Mahan & Broadwell, Memphis, Tenn.

Mo., St. Louis.—F. L. Dittmeier will erect 2 one-story dwellings at 4608-10 Labadie St.; gravel or composition roof; furnace; gas and electric lighting; granitoid sidewalks; cost (without mechanical equipment) \$3500; contract let to John Hartman, 7126 Alabama Ave., St. Louis.

N. C., Raleigh.—B. F. Montague let contract to erect 3 dwellings at East and Edenton Sts.; 7 rooms; cost \$4000 each; is removing dwellings from this site to Idlewild rental purposes.

N. C., Winston-Salem.—H. F. Hauser is reported to have let contract to Marshall & Womack to erect two 2-story 6-room dwellings on Greenwood Ave. between 3d and 4th Sts., to cost \$2000 each, and 4-room cottage on Belows Creek St., to cost \$1000.

S. C., Camden.—B. R. McCreight let contract to W. G. Adams to erect residence; 30x50 ft.; metal-shingle roof; cost \$5000. (Lately noted.)

Tenn., Knoxville.—Miss A. Maria Crawford will erect dwelling at White Ave. and 4th St.; 2 stories; brick; cost \$6000; W. P. Lawson, Contr.; R. F. Graf & Son, Archts., Knoxville.

Tenn., Memphis.—D. F. Wheeler let contract to J. C. Barker to erect residence at 996 S. Wellington St.; cost \$3000.

Tenn., Memphis.—Mrs. E. K. Malone let contract to J. S. Nowlin, Memphis, to erect 2 residences at 1461 and 1465 Jefferson Ave.; cost \$4000.

Tenn., Memphis.—Max Heilbrunner let contract to J. C. Jones, Memphis, to erect residence and garage at 2221 Poplar Ave.; cost \$20,000.

Tex., Dallas.—A. J. Knight, 814 Southwest Life Bldg., let contract to J. H. Knott to erect dwelling at 4818 Swiss Ave.; cost (without mechanical equipment) \$4000; ordinary construction; shingle roof; Pittsburgh heaters; electric lighting. (Lately noted.)

Tex., Matagorda.—Protestant Episcopal church let contract to E. C. Baker to erect rectory.

Va., Norfolk.—John R. Doles and C. M. Bayne let contract to McClannan & Co. to erect 4 double brick residences on O'Keefe St.; cost \$7200.

Va., Norfolk.—F. Clifton Cross will erect 4 two-story dwellings on 20th St. and Omohundro Ave.; 8 rooms; cost \$3000 each; ordinary construction; slate roof; hot-air heating plant (included in contract); combined gas and electric lighting; granolithic sidewalks; plans and construction by W. F. & J. F. Sawyer.

### GOVERNMENT AND STATE

D. C., Washington.—Hospital.—Warren F. Brenizer Co., 141 Q St. N. W., is lowest bidder at \$6200 for excavation incidental to construction of Columbia Hospital for Women, for which Nathan C. Wyeth, 1517 H St., Washington, prepared plans; has \$300,000 appropriation; Elliott Wood, Supt. U. S. Capitol Building and Grounds. (Lately noted.)

La., New Orleans.—Postoffice.—Gray Eagle Marble Co., Knoxville, Tenn., is reported to have contract for 40 carloads of marble to be used in Federal building, for which Norman Ker, 1832 Kalorama Rd. N. W., Washington, D. C., was previously noted to have received general contract at \$364,950 for interior finish. (Other subcontracts noted in June.)

N. C., Winston-Salem.—Postoffice.—Treasury Dept., Oscar Wenderoth, Supervising Archt., Washington, let contract to Wise Granite Co., Richmond Va. to erect lately noted extensions to postoffice, including plumbing, gaspiping, heating apparatus, electric conduits and wiring, lighting fixtures and approaches; building, 82x104 ft.; fireproof; tin roof; cost \$158,000; plans call in part for ornamental ceiling in lobby; marble

tiling for field of floor; wainscoting of marble, with ornamental cap; loggia on first floor supported by heavy columns; the architrave to be of carved ornamental stone cornice; corridors on second floor of terrazzo tiling bordered with marble wainscoting and have marble base; 3 entrances; second floor finish of brick. (See Machinery Wanted.)

Tex., San Antonio.—Hospital.—Southwestern Insane Asylum, F. S. White, Supt., let contract to E. Niggl & Son, San Antonio, to erect hospital for women; fireproof; to accommodate 100 patients; cost (without mechanical equipment) \$50,000; Chas. T. Boelhaue, Archt., Owl Bldg., San Antonio. (Lately noted.)

### MISCELLANEOUS

D. C., Washington.—Clubhouse.—National Press Club, Riggs Bldg., let contract to Arthur Cowhill, Hibbs Bldg., Washington, to remodel structure for club; 80x100 ft.; A. P. Clark, Jr., Archt., 816 14th St. N. W., Washington. (Lately noted.)

La., New Orleans.—Hospital.—Charity Hospital of Louisiana let contract to Geier Bros., New Orleans, to make repairs in pathological building, remove partitions, build lockers, tables, change plumbing, etc.; all windows lengthened and new partitions to be lathed and plastered; plumbing and painting done by owner. (Previously noted.)

Md., Baltimore.—Baseball Park.—Federal Baseball Club of Baltimore, Carroll W. Raslin, Prest., Washington Apartments, let contract to Wm. Myers, West Biddle St., for excavating, grading, draining, etc., at ball park at cost of about \$10,000; has plans by Otto G. Simonson, Maryland Casualty Tower Bldg., Baltimore, for bleachers and 2 pavilions; U-shaped grandstand; steel and wood construction; prepared slag roof; cost \$100,000. (Lately noted.)

Md., Baltimore.—Lumber Depot.—T. J. Shryock Co. let contract to Jno. Hiltz & Sons Co., 3 Clay St., Baltimore, to erect lumber depot; 75x109 ft.; mill construction; slag roof; hot-water heat.

Md., Baltimore.—Orphanage.—Hopkins Colored Orphan Asylum let contract to Walter E. Burnham & Co., Law Bldg., Baltimore, for improvements to building, including construction of 3-story elevator shaft 9x9 ft.; cost about \$5000; Archer & Allen, Archts., Central Savings Bank Bldg., Baltimore.

Mo., Baldwin.—Shed, etc.—J. C. A. Hiller has plans by and let contract to Henry Seibel & Son, Manchester, Mo., to erect frame chicken shed, smokehouse and stable; cost \$3500.

### RAILWAY STATIONS, SHEDS, ETC.

Ark., Batesville.—St. Louis, Iron Mountain & Southern Ry. Co., C. E. Smith, Asst. to Ch. Engr., St. Louis, is reported to have let contract to Gallagher Bros., St. Louis, to erect depot; 24x147 ft.; ordinary brick construction; tile roof; E. M. Tucker, Archt.

Tenn., Memphis.—Chicago, Rock Island & Pacific Ry. Co. let following subcontracts to erect freighthouse: Bradford-Kennedy Co., Omaha, Neb., for lumber; H. O. McGruer, Springfield, Ill., mill work; Dearborn Foundry Co., Chicago, iron work; H. J. Gresham Co., Chicago, sheet metal and tile roof; H. W. Johns-Manville Co., Chicago, mastic floors; Kinnear Mfg. Co., Chicago, steel rolling doors and firedoors; Monarch Metal Weather Strip Co., Chicago, weather strips; cost of building without mechanical equipment, \$80,000; heating and lighting not included in contract; general contract lately noted let to T. S. Leake & Co., 537 Dearborn St., Chicago; some material orders and some subcontracts not yet let. (Lately noted.)

### SCHOOLS

Miss., Scooba.—Kemper County Supvrs. will expend \$10,000 to erect dormitory; 39x109 ft.; 3 stories; brick walls; joint construction; flat tar and gravel roof; hot-air heat; Overstreet, Spencer & Paine, Archts., Jackson, Miss.; contract lately noted let to Standard Construction Co., Meridian, Miss.

Mo., Columbia.—Board of Curators University of Missouri let contract to J. W. Wilson & Son, St. Louis, at \$158,332, to erect library building; Jas. P. Jamieson, Archt., 800 Security Bldg., St. Louis. (Lately noted.)

### STORES

Ala., Birmingham.—Evans Bros. Construction Co., Birmingham, has contract to erect building to contain 4 stores; Harry B. Wheelock, Archt., Birmingham.

Ala., Tuscaloosa.—R. H. Little let contract to erect store and theater building. (See Theaters.)

D. C., Washington.—M. Goldenberg, 918 28th

St. N. W., let contract to M. F. Robey to erect store building at 915-17-19 8th St. N. W.; cost \$3000; Rich & Fitzsimons, Archts., Bond Bldg., Washington. (This is part of improvement lately noted.)

Ga., Savannah.—J. Bernstein and J. Maril let contract to W. A. Chaffee, Savannah, to erect building at Barnard and Congress Sts.; 90x90 ft.; 3 stories; white enamel brick; lower floor for stores; upper floors for offices; fireproof; cost \$40,000. (Lately noted.)

Ga., Waycross.—Mrs. J. H. Redding let contract to V. C. Parker & Son, Waycross, to erect business building; 3 stories; brick; press-brick and plate-glass front; electric elevators; cost \$10,000. (Lately noted.)

La., Crowley.—Sam Eldrich let contract to H. Jaudens to erect business building; 50x30 ft.; fireproof; composition roof. (Lately noted.)

Md., Frederick.—C. E. Cline let contract to Hahn & Betson to erect store building at 139 S. Market St.; 3 stories; about 700 sq. ft. glass and about 500 sq. ft. brick work on front; 23½x36 ft.; all floors carried on steel beams; cream Greendale rug brick; metal sash bars; metal ceilings; slag roof; fire walls; downspouts from roof will be inside building; ventilators in roof; electric wiring; electric elevator; B. Evard Kepner, Archt., Frederick.

Mo., Kansas City.—John Taylor Dry Goods Co. let contract to Selden-Breck Construction Co., St. Louis, to erect building on Main St. and additional story to present structure on Baltimore Ave.; Main St. structure to be 6 stories and basement; steel frame to support 4 additional stories; front base of pink Milford granite, with terra-cotta in exact imitation above; 2 entrances, each with ornamental canopy; flooring, wainscoting and columns in entrances of Vermont white statuary marble, with Belgian black marble for trim; vacuum cleaner; sprinkler system; washed air ventilating system; Baltimore Ave. structure to be equipped with gravity conveyor for handling stock and delivery of packages; Kansas City Structural Steel Co. will furnish steel; total cost of improvements reported as \$750,000; Holbird & Roche, Archts., Chicago; Baird & Huselton, local representatives. (Lately noted to have let contract to Harry Stiver for alterations to Baltimore Ave. structure preparatory to further improvements.)

Mo., St. Louis.—F. W. Woolworth Co. let contract to Murch Bros. Construction Co., Odd Fellows' Bldg., St. Louis, to construct front and entrances in store at 510-511 Washington Ave.; reconstruct elevators, alter St. Charles St. front; cost \$8000.

Okla., Keota.—O'Keefe-Ewers Co. let contract; it is reported, to J. M. Ellis, Stigler, Okla., to erect store building.

S. C., Charleston.—Charleston Fidelity Corp. let contract to erect store, bank and apartment building; lately noted. (See Apartment-houses.)

S. C., Hyman.—C. C. Finklea Co. is reported to have let contract to erect 2-story brick building; metal roof; iron and plate-glass front.

Tex., Corpus Christi.—H. A. Garritt has plans by and let contract to Freeborn & Sherman, Corpus Christi, to erect store building; 25x74 ft.; mill construction; composition roof; electric lighting; cement sidewalks; cost (without mechanical equipment) \$6500. (Lately noted.)

Tex., Galveston.—Valery E. Austin, 307 22d St.; W. D. Haden and others let contract to W. H. Janssen to erect building 20th St. and Ave. E.; 3 stories; brick; 42 ft. 10 in. by 120 ft.; 7 storerooms on first floor, with concrete floors and hollow tile double walls; red pressed-brick exterior; shell roofing; concrete sidewalks; ornamental awning over sidewalk; upper floors for apartments; cost \$20,000 without mechanical equipment; subcontracts to amount to \$3700; plumbing contract let to R. C. Malitz, Galveston; L. S. Green, Archt., Galveston. (Lately noted.)

Tex., Madisonville.—Geo. L. Turner let contract to R. H. Wallace to erect 1-story brick business building.

Tex., Madisonville.—A. Viser let contract to R. H. Wallace to erect 1-story brick business building.

Tex., Pleasanton.—G. H. Smith is reported to have let contract to erect store building; 24x40 ft.

Tex., San Marcos.—T. C. & G. G. Johnson let contract to Walsh & Burney, 416 Conroy Bldg., San Marcos, to erect 2-story store and office building; 95,000 cu. ft. floor space; mill construction; tar and gravel roof; cost of wiring, \$300; concrete sidewalks 5 in. thick; cost of building without mechanical equipment, \$9400; Roy L. Thomas, Archt., Scarborough Bldg., Austin. (Lately noted.)



Tex., Sherman.—W. C. Eubank let contract to W. E. Abel to erect store and office building; cost \$15,000; John Tulloch, Archt., Sherman; electrical work and plumbing not let. (Lately noted.)

Va., Lynchburg.—Mrs. E. M. Wall let contract to W. B. Snead & Son, Lynchburg, to erect proposed store; 42x122 ft.; ordinary construction; Barrett roofing; steam heat costing \$1500; electric lighting; cement sidewalk; freight hand-power elevator costing \$500; cost of building without mechanical equipment, \$18,000; McLaughlin & Johnston, Archts., Lynchburg.

Va., Portsmouth.—Samuel Solomon let contract to C. N. Moody to erect building on Crawford St.; 3 stories; brick; cost \$8000 to \$9000.

Va., Staunton.—J. H. Bryan let contract to G. W. Fretwell, Staunton, to convert building into department store; cost without mechanical equipment, \$50,000; 57x55 ft.; 4 stories and basement; ordinary construction; 40-lb. plate tin roof; cost of heating plant, \$1600; gas and electric lighting; Otis elevator, costing \$2500; Chas. K. Bryant, Archt., Richmond, Va. (Lately noted.)

## THEATERS

Ala., Tuscaloosa.—R. H. Little let contract for foundation for moving-picture theater and store building to Tuscaloosa Concrete Co., Tuscaloosa, and for construction work to W. L. Pounds; seating capacity 600; one story; brick; 55x100 ft.; arched front 35 ft. high; dome top; auditorium 35 ft. wide; wooden floor laid on asphalt concrete foundation; steam heating and ventilating equipment in basement; will be leased to W. F. Howell, proprietor of Diamond Theater. (Lately noted.)

## RAILROAD CONSTRUCTION

### RAILWAYS

Ala., Birmingham.—The Illinois Central R. R., the Central of Georgia Ry. and the St. Louis & San Francisco R. R. will, it is reported, improve and extend their joint terminal facilities at Birmingham. A. S. Baldwin, Chicago; C. K. Lawrence, Savannah, and F. G. Jonah, St. Louis, are Ch. Engrs. for the three lines, respectively.

Ala., Broughton.—About 5 mi. of grade are built on the extension of the Gulf, Florida & Alabama Ry., now under construction from Broughton to Pine Hill, Ala., 50 mi. There are 50 teams and 500 men on the job. J. T. McCarthy & Co., are contractors, with office at Monroeville, Ala.

Ala., Decatur.—Nashville, Chattanooga & St. Louis Ry. says it does not contemplate building from Lax to Decatur, 20 mi., in the future. (See Manufacturers Record, Jan. 15.)

Ala., Tuscaloosa.—Birmingham-Tuscaloosa Ry. & Utilities Co. is offering for sale \$600,000 of 6 per cent. 3-year notes, the proceeds of which will be used in part to build an extension at Tuscaloosa. George I. Brown, Birmingham, Ala., is Gen. Mgr.

Ark., Warren.—Warren, Johnsonville & Saline River Ry. Co. will build with its own forces an extension of main line to the Saline River, 6 mi., completing it in time for operation by January next. Bridges only short frame and piling. C. W. Holderbaum, Warren, Ark., is Ch. Engr.

Fla., Jacksonville.—Florida R. R. Com. has issued order, after several hearings, and Jacksonville Terminal Co. will build new union station on Myrtle Ave. site, starting construction not later than July 15. Morton Riddle is Chrmn. of the Terminal Company and J. C. Blanton Mgr.

Fla., Miami.—Materials have been ordered for construction of street railway proposed by the Miami & South Florida Interurban Ry. Co., of which H. C. Roome is Pres., and it is announced that work will begin and line be completed within 100 days.

Fla., Pensacola.—Gulf, Florida & Alabama Ry. will lay double track, it is stated, to its two wharves, and will also construct storage yards on 32 acres of filled-in land between DeVillier and Barcelona Sts. G. A. Berry is V.-P., Gen. Mgr. and Ch. Engr. at Pensacola.

Fla., Tampa.—H. C. Ferriotti, Chrmn. Exec. Com. Atlantic, Okeechobee & Gulf R. R. Co., is quoted saying financial arrangements are made to begin construction by Mch. 1 on line from Tampa to the East Coast of Florida. E. E. West, Jacksonville, Fla., is Pres.

Miss., Fernwood.—Fernwood & Gulf R. R. is expected to build an extension to Columbia, Miss. W. D. Hurt, Fernwood, Miss., is Ch. Engr.

Miss., Union.—Meridian & Memphis Ry.,

Md., Arlington.—Jacob Cohen, N. W. Cor. Park Heights Ave. and Belvidere Ave., let contract to W. T. Childs, Belle and Garrison Aves., N. Forest Park, Baltimore, to erect moving-picture theater; 23x100 ft.; fireproof; slag roof; gas heat costing \$500; gas and electric lighting, costing \$300; cost of building (without mechanical equipment) \$5000; F. E. Beall, Archt., 307 St. Paul St., Baltimore.

Md., Baltimore.—Riverside Amusement Co. will expend \$10,000 to erect moving-picture theater at 124-126 E. Fort Ave.; 30x110 ft.; ordinary construction; slag roof; steam heat; electric (outside current) lighting; contract lately noted let to Henry Pierson & Sons, 1000 Olive St., Baltimore.

S. C., Hartsville.—Hartsville Lodge, No. 173, A. F. and A. M., is reported to have let contract for theater and lodge building. (See Association and Fraternal.)

Tex., San Antonio.—Thos. F. Brady let contract to erect theater and office building. (See Bank and Office.)

## WAREHOUSES

Tenn., Memphis.—Phelan estate let contract to R. F. Creson to erect warehouse at 250 Calhoun Ave.; cost \$5000.

Tex., Dallas.—Chenoweth Bros. let contract to W. A. Stover, Dallas, to erect warehouse; 167x91x190x125 ft.; triangular shape; mill construction; gravel roof; cost, without mechanical equipment, \$7500; A. Martens, Archt., Dallas. (Lately noted.)

Va., Norfolk.—J. W. Legum let contract to W. L. Parron, Norfolk, to erect addition to warehouse; cost \$4000.

recently completed to Union, will survey, it is reported, for an extension to Carthage, Miss., about 25 mi. S. A. Neville, Meridian, Miss., is V.-P. and Gen. Mgr.; J. T. Schley of Mobile, Ala., is Pres.

Mo., Ava.—Kansas City, Ozark & Southern R. R. contemplates, according to a local report, betterments to roadbed and bridges. J. W. Byng is Gen. Mgr. at Ava, Mo.

Mo., Cape Girardeau.—Cape Girardeau & Jackson Interurban Ry. Co. is reported to have applied to the Missouri Public Service Com. for authority to build its line to Jackson, 3½ mi. W. H. Harrison is Pres. and Gen. Mgr.

Mo., Mexico.—Chicago, Burlington & Quincy R. R., says a report, contemplates building a cut-off line from Mexico to Carrollton, Mo., about 90 mi. W. L. Breckinridge, Chicago, Ill., is Engr. Maintenance of Way.

N. C., Selma.—Atlantic Coast Line has received bids and contract is expected to soon be let for 62 mi. of second track between Parkton and Selma, for which the masonry is completed. D. W. Gross is engr. of construction at Wilmington, N. C.

N. C., Yanceyville.—Comms. of this (Caswell) county have ordered a special election Feb. 17 in Dan River, Anderson, Yanceyville and Stony Creek townships on bonds to aid construction of the proposed Greensboro, Northern & Atlantic R. R., which will connect Purley, Yanceyville and Locust Hill. T. O. Troy is Pres. and J. W. Fry V.-P. at Greensboro, N. C. Walter Washabaugh, Charlottesville, Va., is Chief Engr.

Okl., Ardmore.—Oklahoma, New Mexico & Pacific Ry. is reported to have received a proposition from the Lawton (Okl.) Chamber of Commerce that it extend its line which is now building to Lawton. J. L. Hamon, Ardmore, is V.-P.

Okl., Beaver.—Southwestern Construction Co., says a report, has begun survey for a railroad from Beaver to connect with the Wichita Falls & Northwestern Ry. at Forgan, Okla., about 5 mi. Citizens of Beaver are chiefly interested. J. G. Trindle of Liberal, Kans., is Ch. Engr. Mr. Thompson of Balke will do construction.

S. C., Columbia.—Columbia Ry. & Navigation Co., it is announced, will build a 3-mi. railroad from its warehouse at Granby Landing to the joint railroad yards. G. A. Guignard is Pres. and Norton Monsarrat assistant to the Pres.

S. C., Greenville.—Piedmont & Northern Ry. has filed application to increase its capital stock from \$50,000 to \$150,000, according to action of stockholders at recent meeting. Company, as heretofore announced, contemplates further extensions. W. S. Lee, Charlotte, N. C., is V.-P. and Ch. Engr.

S. C., Johnsonville.—The Georgetown & Western Ry., says a report, is building a

branch from Johnsonville to Lake City, S. C., about 20 mi. R. J. Clifford is Pres. at Georgetown, S. C.

Tenn., Memphis.—Pres. C. H. Markham of the Illinois Central R. R. is quoted saying that improvements are contemplated on the company's lines in the South. A. S. Baldwin, Chicago, Ill., is Chief Engr.

Tenn., Shelbyville.—Shelbyville, Petersburg & Decatur Railroad Co., which proposes to build a line about 75 mi. long from Shelbyville to Decatur and Athens, Ala., has organized by electing S. P. Kirkpatrick Pres. and Gen. Mgr., H. H. Nelson V.-P., R. W. Clark Treas., and T. G. Cunningham Secy. S. F. Howard has begun survey.

Tex., Amarillo.—The route of the proposed Texas, Kansas & Omaha R. R. is from Amarillo north through Dumas and Stratford, Tex., and Garden City, Kans., to Omaha, Neb., about 600 mi. F. T. Burnham, Dwight Bldg., Kansas City, Mo., promoter, is quoted saying agreement is closed with New York contractors and construction will begin about March 1.

Tex., Dallas.—M. M. Phinney, district manager for Stone & Webster of Boston, announces that the Dallas Consolidated Ry. Co. will, as soon as satisfactory settlement is made of franchise requirements, begin and complete as speedily as possible 10 extensions double-tracking and other improvements. Altogether more than \$6,000,000 is to be spent.

Tex., Dallas.—J. W. Crotty, V.-P. and Gen. Mgr. Eastern Texas Traction Co., is quoted saying arrangements have been made with Stone & Webster, 147 Milk St., Boston, to aid in financing line from Dallas to Greenville, Tex., and construction will be resumed. Nearly all grade is completed. M. M. Phinney of Dallas, district manager for Stone & Webster, is similarly quoted.

Tex., Galveston.—Gulf, Colorado & Santa Fe Ry., according to a report quoting F. G. Pettibone, V.-P. and Gen. Mgr., will spend \$132,910.48 for betterments, including \$61,906.37 on the valley yard at Galveston. Work has begun. F. Merritt, Galveston, is Ch. Engr.

Tex., Houston.—Houston Electric Co., David Daly, Mgr., has begun laying an additional track on the Harrisburg road between Milby St. and the old city limits.

## MACHINERY, PROPOSALS AND SUPPLIES WANTED

Manufacturers and others in need of machinery or supplies of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery or supplies needed we will make their wants known free of cost, and in this way secure the attention of manufacturers and dealers throughout the country. The Manufacturers Record has received during the week the following particulars as to machinery and supplies wanted.

### "WANTS"

Art Glass.—J. D. Hammons, Helena, Ark.—Prices on art glass for church building.

Bakery Equipment.—J. S. Jones, Flat Rock, N. C.—Small outfit for bread baking.

Bank Fixtures, etc.—Citizens' Bank & Trust Co., Livingston, Tenn.—Prices on bank fixtures, safe and vault.

Belting.—National Interior Finish Co., E. M. Byrne, Jr., Box 355, Huntington, W. Va.—Prices about Feb. 10 best grade heavy weight, short lap oak tanned leather belting as follows: 90 ft.—20 in., 34 ft.—12 in., 61 ft.—10 in., 171 ft.—8 in., 38 ft.—7 in., 228 ft.—6 in., 166 ft.—5 in. and 197 ft.—4 in.

Blow Pipe System.—H. M. Wade Mfg. Co., Charlotte, N. C.—Blow pipe system for machine-room.

Blowers.—Universal Cooler Co., J. W. Bell, Mgr., Shreveport, La.—Prices on blowers.

Boiler.—North Wilkesboro, N. C., W. A. Bullis, Town Clerk.—Boiler for light plant. (See Engine and Boiler.)

Boiler.—Comms. Public Works, Philip H. Arrowsmith, Atty., Lake City, S. C.—Bids opened Feb. 10 on boiler. (See Electric-light Plant.)

Boiler.—Chick Springs Co., Greenville, S. C.—50 or 60 H. P. boiler; second-hand, good condition.

Boilers.—Arkansas Lime Co., Ruddells, Ark.—Two 150 H. P. fire tube boilers; second-hand, good condition, guaranteed.

Boilers.—National Interior Finish Co., E. M. Byrne, Jr., Mgr., Box 355, Huntington, W. Va.—Prices about Feb. 10 for two

Tex., Houston.—International & Great Northern R. R., it is reported, will make extensive repairs and improvements to 75 mi. of line as a result of flood damages. O. H. Crittenden, Houston, Tex., is Ch. Engr.

Tex., San Angelo.—J. D. Sugg of the San Angelo Street Ry. Co. is reported planning an extension.

Tex., Sweetwater.—Ben Anthony, Secy. Gulf & Pacific Ry. Co., says the proposed line will be 125 mi. long from Sweetwater to Comanche, Tex., via Hylton, Shep, Moro and Cross Plains. Surveys not yet finished. Thos. Trammell is Pres.; E. O. Wedge, V.-P., and J. V. W. Holmes, Treas.

Tex., Waco.—Young Men's Business League of Waco and Chamber of Commerce, Meridian, Tex., are reported working on a plan for construction of an interurban electric railway from Waco to Cleburne, Tex., about 80 mi., via China Springs, Valley Mills, Clifton, Meridian, Walnut Springs and Glen Rose, Tex. J. J. Powers, Waco, Tex., may give information.

Tex., Walnut Springs.—Track laying is about to begin on the Glen Rose & Walnut Springs Ry., 14 mi. long. It is reported, rails and other material having been received.

Va., Norton.—Southern Ry. Co. denies recent press report that it would build an extension from Norton into Kentucky coal fields.

W. Va., Madison.—Chesapeake & Ohio Ry. denies that it will soon build a branch on Pond Fork.

W. Va., Morgantown.—Morgantown & Southern R. R. is reported planning construction of 2 mi. of track at Morgantown. J. W. Wiles is Pres.

## STREET RAILWAYS

La., New Orleans.—New Orleans Ry. & Light Co. has bought from the city franchises for two lines, respectively on Broadway from Claiborne Ave. to Maple St., and on Claiborne Ave. from Clio St. to the upper limits of the parish. Hugh McClosky is Pres. and L. C. Datz Engr.

Okl., Lawton.—City Comms. have authorized an election to vote on a franchise for the Lawton Lighting & Railway Co. to operate street cars. B. R. Stevens, Secy. Choctaw Ry. & Lighting Co., McAlester, Okla., is mentioned as interested.

72 in. by 16 ft. 125 H. P. boilers complete with front, steel casings and stack.

Boilers.—Consolidated Beef & Provision Co., 104 S. Exeter St., Baltimore, Md.—Boilers.—See Packing Plant Equipment.

Brass Shells.—L. D. Sergeant, Greensboro, N. C.—Brass Shells.—See Lighting Fixture Materials and Fittings.

Bricks.—E. B. Bonney, City Secy., Houston, Tex.—Bids until Jan. 23 to purchase 120,000 No. 1 Standard paving bricks; specifications by E. E. Sands, City Engr., on file in office of L. P. Scarborough, Purchasing Agent.

Bridge Construction.—Cameron, Tex.—Bids until Feb. 11 to construct 550-ft. highway bridge across Brazos River at Port Sullivan crossing; to be built by Robertson and Milan counties; plans and specifications on file after Feb. 1 at office of J. L. Goodman, County Judge, Franklin, Tex.; County Judge John Watson, Cameron, Tex., and J. C. Feld Engineering Co., 106 Feld Bldg., Denison, Tex.

Bridge Construction.—Jas. E. Miller, Secy., Road Com., Sullivan County, Blountville, Tenn.—Preliminary correspondence with contractors relative to building (cost, etc.) steel bridge.

Bridge Construction.—Sumter County Comms. Roads and Revenues, Americus, Ga.—Bids until Feb. 16 to construct 2 bridges; reinforced concrete; four 30-ft. and two 20-ft. spans, and two 30-ft. spans; estimated cost \$8000. (Lately noted.)

Bridge Construction.—Dept. of Public Finances, A. G. Ricks, Commr., New Orleans, La.—Bids until Feb. 26 to erect

Strauss trunnion bascule bridge over entrance to Southern Yacht Club pen on line of New Basin Canal shell road; plans and specifications at office of City Engr.

**Bridge Plans.**—Tennessee River Bridge Com., Theo. F. King, Chmn., Chattanooga, Tenn.—Bids invited Feb. 18 for engineers to submit competitive designs and estimates to construct bridge across river at Chattanooga; design to be approved by War Dept., U. S.; Hamilton county voted \$500,000 bonds to erect structure.

**Bronze Rod.**—Navy Dept., Bureau of Supplies and Accounts, T. J. Cowie, Paymaster-Gen., Washington, D. C.—Bids until Feb. 10 to furnish 11,925 lbs. naval miscel bronze rod, schedule 6286; delivery Navy-yard, Washington, D. C.; for copies of schedule apply to navy pay office nearest navy-yard.

**Building Materials, etc.**—Jones, Woodall & Black, Box 15, Fuquay Springs, N. C.—Samples and prices on materials of interest to architects, contractors and builders; tile and roofing specialties.

**Building Materials.**—M. S. Clark, Gen. Contr., Zebulon, N. C.—Prices on brick, lime, cement, metal ceiling and cornice, I beams, doors and windows, store fronts, ceiling, flooring, plate-glass, door and window frames, tin shingles, tin roofing, inside finish yellow pine, novelty siding, patent plaster, corner mould, moulded gutters and down spouts; f. o. b. Zebulon.

**Building Materials.**—Lynnhurst Cottage Sanitarium, Dr. A. C. Watts, owner, R. F. D. No. 7, Birmingham, Ala.—Prices on building materials, roofing, plumbing, etc., for 10 two-room cottages.

**Building Materials.**—Dept. of Justice, office of R. V. La Dow, Supt. of Prisons, Washington, D. C.—Bids until Feb. 17 to furnish rough lumber for frames and interior finish, doors, cast glass work and finishing hardware for hospital building, U. S. Penitentiary, Leavenworth, Kan.

**Building Materials.**—Robt. L. Smith, R. F. D., Cape Charles, Va.—Prices on building materials for 16x38x16-ft. dwelling, including lumber, roofing, inside finish and paints.

**Building Materials.**—Wise Granite Co., Richmond, Va.—Prices on plumbing, heating, electric wiring, roofing, sheet metal, plastering, iron work, mill work and painting for \$186,000 postoffice building at Winston-Salem, N. C.

**Buckles.**—See Overall Machinery, etc., Jacksonville, Fla.

**Buttons, etc.**—P. G. Russell, care Merchants' Broom Co., Jacksonville, Fla.—Correspondence with manufacturers of buttons for overalls and work shirts and overall buckles. (See Overall Machinery, etc.)

**Cars.**—Pennsylvania Equipment Co., West End Trust Bldg., Philadelphia, Pa.—Several box cars and flat cars; also flat bottom gondolas and Rodgers ballast cars of 15-yds. capacity.

**Clock.**—Trigg County (F. G. Terry to be addressed), Cadiz, Ky.—Prices on clock for tower of courthouse.

**Coal Colliers.**—Navy Dept., Josephus Daniels, Secy., Washington, D. C.—Bids until Feb. 2 to construct 2 colliers for Isthmian Canal Com.; circulars of requirements for bidders on said vessels obtainable on application to department.

**Cotton Picker.**—R. V. Marchant, Elizabeth City, N. C.—Will purchase cotton picker.

**Cottonseed Oil, etc.**—Blanchi & Cauchi, Merchants & Manufacturers' Agents, Malta.—Correspondence with manufacturers and exporters of cottonseed oils (edible); lard in 28-lb. pails; flour in 112-lb. cotton bags; view to exclusive agencies; wish quotations and samples.

**Concrete Mixers.**—Wilburn Hill and A. Brown, Attalla, Ala.—Data, catalogues and prices on concrete mixers. (See Contractors' Equipment.)

**Contractors' Equipment.**—Wilburn Hill and A. Brown, Attalla, Ala.—Interested in heavy contracting machinery, including dredges, steam shovels, drag-line machines and concrete mixers. Send data, catalogues and prices.

**Crane (Locomotive).**—Justice Cox, Jr., & Co., 1236 Land Title Bldg., Broad and Sansom Sts., Philadelphia, Pa.—Fifteen second-hand locomotive crane suitable for handling soft coal; Pennsylvania delivery.

**Cranes (Locomotive).**—G. T. Stalley, Box 390, Cleveland, O.—15-ton locomotive crane; good condition.

**Cross-arms.**—Geo. L. Smith, Cadiz, Ky.—Prices on cross-arms with locust plns.

**Dairy Supplies.**—Hackney Bros. Co., Charlotte, N. C.—Agencies for dairy supplies.

**Dam Construction, etc.**—Chatham County Comrs., G. Reuben Butler, Clerk, Savannah, Ga.—Open bids Feb. 12 to construct cofferdam, pump water out of space enclosed and keep that space dry.

**Desks.**—Harvey & Harvey, Mfrs.' Agents, Havana 17, Habana, Cuba.—Bids until Feb. 15 (postponed date) on 15,000 school desks; single; 3 sizes—small, medium and large; contract to be made between manufacturer and Cuban Government.

**Distilling Machinery.**—Waverly Cooperage & Ice Co., Waverly, Va.—Small plant to distill water for making 4 tons ice daily.

**Drag Line Machines.**—Wilburn Hill and A. Brown, Attalla, Ala.—Data, catalogues and prices on drag-line machines. (See Contractors' Equipment.)

**Dredging Machinery.**—Wilburn Hill and A. Brown, Attalla, Ala.—Data, catalogues and prices on dredges. (See Contractors' Equipment.)

**Electrical Distribution System.**—S. S. Ingman, Bay and Abercorn Sts., Savannah, Ga.—Receives bids to construct 2 mi. electric distributing lines in St. George, S. C.

**Electrical Equipment.**—Arkansas Power Co., 308 State National Bank Bldg., Little Rock, Ark.—500 K. W. steam turbines, switchboard, transformers and transmission line material.

**Electric Welding Outfit, etc.**—Office of Gen. Purchasing Agent, Isthmian Canal Com., F. C. Boggs, Maj., Corps of Engrs., Washington, D. C.—Bids until Feb. 7 for electric welding outfit, tinsmith's plate-bending roll, steel locker cabinets, water closets and seats, curb boxes, soil pipe and fittings, wrought iron and steel pipe, pipe fittings, flush pipe, valves, lead pipe, sheet lead, pig lead, linoleum, linoleum cement and brass and strips for linoleum. Blanks and general information relating to circular No. 823 may be obtained from this office or offices of assistant purchasing agents, 24 State St., New York; 614 Whitney-Central Bldg., New Orleans, and 1086 North Point St., San Francisco; also from U. S. Engr. offices in Seattle, Los Angeles, Baltimore, Philadelphia, Pittsburgh, Boston, Buffalo, Cleveland, Cincinnati, Chicago, St. Louis, Detroit, Milwaukee, St. Paul, Chattanooga, Louisville, Mobile and Galveston; Commercial Club, Kansas City, Mo.; Chamber of Commerce, Quincy, Ill., and Commercial Club, Tacoma, Wash.

**Electric Wiring.**—National Interior Finish Co., E. M. Byrne, Jr., Mgr., Box 395, Huntington, W. Va.—Prices about Feb. 10 for conduit, wiring, etc., for 90x200-ft. hardwood finishing plant.

**Electro-plating Machinery, etc.**—Klozan Co., Johnstown Trust Bldg., Johnstown, Pa.—Electro-plating machinery and materials. (See Machine Shop Equipment.)

**Engine and Boiler.**—North Wilkesboro, N. C., W. A. Bullis, Town Clerk.—Engine

**Flooring.**—Thos. Purvis, Selma, Ala.—Will need 2000 ft. quarter-sawn white oak seven-eighth flooring for church building at Eutaw, Ala.

**Flour.**—Blanchi & Cauchi, Malta.—Correspondence with manufacturers and exporters of flour in 112-lb. cotton bags. (See Cottonseed Oils, etc.)

**Furniture (Steel).**—Covington Virginian, 202 Bath St., Covington, Va.—Steel Furniture. (See Printing Plant Equipment.)

**Gas (Producer) Plant.**—S. & W. Mining Co., Hot Springs, Ark.—Data on plant (including cost of construction, operation and sales) for converting 6-ft. body of lignite coal into gas for manufacturing purposes, creosote, etc.

**Glassware.**—L. D. Sergeant, Greensboro, N. C.—Glassware.—See Lighting Fixture Materials and Fittings.

**Heating Plant.**—State Board of Control, P. K. Yonge, Chmn., Windsor Hotel, Jacksonville, Fla.—Bids until Feb. 9 to install heating plant in law building for University of Florida at Gainesville, Fla.; W. A. Edwards, Archt., 632 Candler Bldg., Atlanta, Ga.

**Heating Plant.**—Wise Granite Co., Richmond, Va.—Prices on heating plant for \$186,000 postoffice at Winston-Salem, N. C. (See Building Materials.)

**Heating Plant.**—Board of Education, W. S. Rosenheim, member, Williamson, W. Va.—Will let contract Feb. 2 to install heating plant in 19-room school building.

**Heating Plant.**—W. L. Edmondson, Lorraine, Tex.—Prices on hot-air heating plant for 2-story 48x100-ft. store building.

**Heating Plant.**—J. D. Hammons, Helena, Ark.—Prices on heating plant for church building.

**Heating Plant.**—A. B. Andrews, Harrison, Ark.—Prices on hot-air heating plant for \$8000 school building.

**Hose and Rope.**—Mississippi River Com., 1st and 2d Dists., U. S. Engr.'s office, E. M. Markham, Maj., Engrs., Memphis, Tenn.—Bids until Feb. 16 to furnish and deliver 69,400 lbs. manila rope and 1000 ft. rubber hose. Information on application.

**Ice Machinery.**—Elberta Farmers' Canning & Transportation Co., Paul Doegge, Secy., Elberta, Ala.—Correspondence with manufacturers of ice-making machines.

**Iron Stairs.**—See Fire Escapes.

**Lard.**—See Cottonseed Oils, etc.

**Levee Construction.**—C. Stevenson, 618 Wilson Bldg., Dallas, Tex.—Bids to construct about 15,000 cu. yds. levees.

**Levee Construction.**—Garland Levee Dist., Miller county, J. D. Williams, Secy., Board of Directors, Texarkana, Ark.—Bids until Feb. 5 to construct 25 mi. levees on west bank of Red River; work to be let in 3 parts as follows: Stations 0 to 450, about 400,000 cu. yds.; 451 to 900, about 375,000 cu. yds.; 901 to 1317, about 310,000 cu. yds.; work suitable for dragline machines or teams and scrapers; plans and specifications at office of Morgan Engineering Co., Engr., 610 Goodwyn Institute, Memphis, Tenn., and Secy. of Board. (Lately noted.)

**Lighting Systems.**—F. E. Bartmess, Bay Minette, Ala.—Data and prices on city lighting systems, including gasoline system, tem.

**Lighting-Fixture Materials and Fittings.**—L. D. Sergeant, Greensboro, N. C.—Unfinished brass shells and fittings, glassware and other material for manufacture of electric, gas and combination lighting fixtures.

**Machine Shop Equipment.**—Klozan Co., Johnstown Trust Bldg., Johnstown, Pa. Presses, pipe-bending and forming machines, pipe-cutting machines, automatic turret lathes for manufacturing small parts, electro-plating outfits and material and necessary small power equipment for proposed factory to manufacture patented electric, gas, acetylene and gasoline lighting fixtures.

**Machinery, etc.**—A. Henry Pikler, Montclair, N. J.—Interested in American products, with view to representation in Austria-Hungary and Balkan States; interests include machinery, implements and apparatus; also processes, methods and systems of various industries and agriculture. (Mr. Pikler about to establish consulting engineering firm in Budapest.)

**Mattocks Shovels.**—U. S. Engr. Office, Jos. E. Kuhn, Lieut.-Col., Corps of Engrs., Washington Barracks, D. C.—Bids until Jan. 21 (in triplicate) for engineer department pattern pick mattocks and shovel, model 1912. Information on application.

**Metal Store Fronts.**—Sterling Cotton Mills, Franklinton, N. C.—Addresses of manufacturers of metal store fronts.

FOR the benefit of business concerns, engineers, contractors, machinery manufacturers, dealers and others who find it profitable to follow up daily the industrial, commercial, railroad and financial development of the South and Southwest as published in this Construction Department,

### We issue every Business Day in the Year THE DAILY BULLETIN

The construction news as published in the Daily Bulletin is invaluable to all business people who want to keep in daily touch with the organization of business enterprises of all kinds throughout the whole South. Unlimited possibilities for the creation of business, for securing contract work, for the sale of machinery and supplies of all kinds, for bond buyers and others, are to be found through a close following up of the news in the Daily Bulletin.

The Daily Bulletin is an exceptionally desirable advertising medium.

The subscription price is \$25.00 a year. Are you a subscriber to it, or an advertiser in it? If not, you are missing an opportunity for profitable business.

**Electrical Equipment.**—Navy Dept., Bureau of Supplies and Accounts, T. J. Cowie, Paymaster-Gen., Washington, D. C.—Bids until Feb. 17 to furnish 2 switchboards and spare parts, schedule 6302; delivery Navy-yard, Norfolk, Va.; for copies of schedules apply to navy pay office nearest navy-yard.

**Electrical Machinery.**—Geo. L. Smith, Cadiz, Ky.—Prices on transformers, lighting arresters and other electrical apparatus.

**Electrical Machinery.**—Villa Rica Electric Light & Power Co., Villa Rica, Ga. Prices on second-hand 50 K. V. A., 60-cycle, 2300-volt, 300 R. P. M., direct-connected unit (G. E. machine and Harrisburg engine preferred); A1 condition and guaranteed.

**Electrical Machinery.**—Arkansas Lime Co., Ruddells, Ark.—180 K. W., 220-volt, D. C. generator; switchboard, complete, and 12 motors for above current, 10 to 40 H. P. each.

**Electric Motors.**—Covington Virginian, 202 Bath St., Covington, Va.—Electric motors. (See Printing Plant Equipment.)

**Electric-Light Plant.**—Comms. Public Works, Philip H. Arrowsmith, Atty., Lake City, S. C.—Bids opened Feb. 10 to install and equip electric-light plant; plans and specifications on file with board; also prices on engine, boiler, generator and electrical equipment for 100 H. P. plant.

**Electric Motors.**—Universal Cooler Co., J. W. Bell, Mgr., Shreveport, La.—Prices on electric motors.

and boiler of 150 to 200 H. P. as auxiliary to water-power for light plant operation; could use second-hand, if first-class condition; give estimates, including installation.

**Engine.**—Arkansas Lime Co., Ruddells, Ark.—200 H. P. Corliss engine; second-hand, good condition, guaranteed.

**Engine.**—Cave Spring Planing Mill, Cave Springs, Ga.—25 to 50 H. P. engine; to burn crude oil or kerosene.

**Engine.**—Comms. Public Works, Philip H. Arrowsmith, Atty., Lake City, S. C.—Bids opened Feb. 10 on engine. (See Electric-Light Plant.)

**Engine.**—National Interior Finish Co., E. M. Byrne, Jr., Box 395, Huntington, W. Va.—Prices about Feb. 10 for 160 to 175 H. P., 18x22 in., class "B" rolling mill style, single detached outboard throttling governor, balanced valve engine.

**Engines.**—Consolidated Beef & Provision Co., 104 S. Exeter St., Baltimore, Md.—Engines. (See Packing Plant Equipment.)

**Engines.**—Arkansas Power Co., 308 State National Bank Bldg., Little Rock, Ark.—Te. 500 K. W. steam turbines. (See Electrical Equipment.)

**Fans.**—Universal Cooler Co., J. W. Bell, Mgr., Shreveport, La.—Prices on power and exhaust fans.

**Fire Apparatus.**—White Lane Moss, Mayor, Pineville, Ky.—Catalogues and prices on fire apparatus.

**Fire Escapes.**—C. M. McCord, Atlantic Beach, Fla.—Iron stairs for fire escapes.



**Metal Work.**—Office of Lighthouse Inspector, New Orleans, La.—Bids until Feb. 2 to furnish metal work for superstructure of Galveston Jetty Light Station, Tex.; blank proposals and particulars obtainable on application to Lighthouse Inspector.

**Motor Dredge Tenders.**—U. S. Engr. Office, E. Eveleth Winslow, Lieut.-Col., Engrs., Custom-house, Norfolk, Va.—Bids until Feb. 12 to construct 2 motor dredge tenders Perry and Skyeoak; information on application.

**Moving Picture Theater Equipment, etc.**—Deavours & Hughes, Laredo, Tex.—Prices on equipment and inside fittings for \$8000 to \$10,000 moving picture theater.

**Oil Mill Machinery.**—See Paint Machinery, etc.

**Overall Machinery, etc.**—P. G. Russell, care Merchants' Broom Co., Jacksonville, Fla.—Correspondence with manufacturers of overall machinery and work shirts machinery and equipment; also with makers of shirt and overall buttons and overall buckles.

**Overall Machinery.**—R. P. Johnson, rear First National Bank, Wytheville, Va.—Prices on overall machinery.

**Packing Plant Equipment.**—Consolidated Beef & Provision Co., 104 S. Exeter St., Baltimore, Md.—Opens bids Feb. 15 for packing-house equipment, including sausage machinery, tracking, refrigerating, boilers, engines, etc.

**Paint Machinery, etc.**—G. H. Cambre Co., Alexandria, La.—Machinery to manufacture mineral fireproof paints, floor oils and sweeps, sanitary disinfectants and lubricating oils.

**Paints.**—See Building Materials.

**Paving.**—City, E. E. Sands, City Engr., Houston, Tex.—Bids until Jan. 24 to pave Hamilton and Runnels Sts.; cost \$40,000.

**Paving.**—Lund & Hill, Engrs., Little Rock, Ark.—Bids until Feb. 3 to construct 14½ blocks of 36-ft. streets on Spring St. from Markham to 10th and adjacent cross streets; plans and specifications at office of engineers.

**Paving, etc.**—John V. Foster, Commr. Streets, Sewers and Public Improvements, Waco, Tex.—Bids until Jan. 23 to pave Franklin St. from S. 1st St. to S. 21 St.; about 2495 sq. yds. paving, 570 lin. ft. gutter and 275 lin. ft. headers; N. 11th St. from Vermont St. to Twice Ave., about 3690 sq. yds. paving; G. E. Byars, City Engr.

**Paving.**—Board of Awards, Jas. H. Preston, Prest., care City Register, City Hall, Baltimore, Md.—Bids until Jan. 28 to grade, curb and pave with vitrified brick and sheet asphalt, on concrete base, on following streets: Contract No. 73, about 87,500 sq. yds. sheet asphalt and 10,300 sq. yds. vitrified block, on Hughes, Montgomery, Henrietta, Hamburg, Cross, West, Clement, Paca, Warner, Leadenhall, Race, Patapsco, William and Towson Sts., and Fort, Battery and Riverside Aves.; contract No. 74, about 29,300 sq. yds. sheet asphalt and 3400 sq. yds. vitrified block, on Oliver, Wilson, Barclay, Prestman, Robert and Laurens Sts.; specifications, etc., obtainable at office of Paving Com., R. Keith Compton, Chmn., City Hall.

**Pipe (Sewer).**—City Development Co., M. Goode Homes, Engr., Columbia, S. C.—Bids until Jan. 29 on standard terra-cotta sewer pipe and specials; 4280 ft. 12-in., 955 ft. 15-in. and 870 ft. 18-in. pipe; two 12x15-in. increasers, two 15x18-in. increasers, nine 12-in., six 15-in. and four 18-in. Y branches; thirty 12-in., four 15-in. and one 18-in. bends; all f. o. b. cars Columbia.

**Piping, etc.**—Cimarron Oil & Gas Co., Box 33, Oklahoma City, Okla.—Casing, etc.

**Piping.**—Texas Supply Co., 1220 Bowie St., Beaumont, Tex.—About 100,000 ft. each of ½, ¾ and 1-in. galvanized pipe; new seconds; odds and ends or good second-hand; 13 in. and over in length; do not require with threads and couplings.

**Piping.**—S. S. Ingman, Bay and Abercorn Sts., Savannah, Ga.—Receives bids to lay 15,000 ft. water mains in St. George, S. C.

**Plumbing, etc.**—Treasury Dept., Oscar Wenderoth, Supervising Archt., Washington, D. C.—Bids until Feb. 29 for changes in plumbing, gas piping, conduit and wiring system and lighting fixtures at U. S. post-office, Jefferson, Tex.

**Plumbing.**—See Building Materials.

**Plumbing.**—Wise Granite Co., Richmond, Va.—Prices on plumbing for \$186,000 postoffice at Winston-Salem, N. C. (See Building Materials.)

**Poles.**—Geo. L. Smith, Cadiz, Ky.—Prices on Northern cedar poles 6 in. at top.

**Power Equipment.**—See Machine Shop Equipment, Johnstown, Pa.

**Printing Plant Equipment.**—Covington Virginian, 202 Bath St., Covington, Va.—Receiving prices on full equipment linotypes, presses, type, electric motors, steel furniture, etc. for commercial printing plant and daily newspaper.

**Pumps.**—Bodock Gasoline Co. (Geo. L. Miller and others), Ponca, Okla.—Prices on gas pumps for use in plant to make gasoline from casing-head gas and utilize dry gas for fuel.

**Rails.**—J. T. Grogg, West Raleigh, N. C.—Prices on about 11,000 lin. ft. steel rails, 15 to 20 lbs., for lumber-hauling tram road; delivered f. o. b. cars Hamlet, N. C.

**Refrigerating Machinery.**—Consolidated Beef & Provision Co., 104 S. Exeter St., Baltimore, Md.—Refrigerating Machinery. (See Packing Plant Equipment.)

**Refrigerating Machinery.**—Universal Cooler Co., J. W. Bell, Mgr., Shreveport, La.—Prices on refrigerating machinery.

**Revetment.**—U. S. Engr. Office, Herbert Deakne, Maj., Engrs., Kansas City, Mo.—Bids until Feb. 16 to construct following revetment on Missouri River: 13,000 ft. 2 mi. from Lupus, Mo.; 18,000 ft. 2 mi. from Napoleon, Mo., and 13,000 ft. 3 mi. from Arrow Rock, Mo. Information on application.

**Roofing.**—Jones, Woodall & Black, Box 15, Fuquay Springs, N. C.—Samples and prices on roofing. (See Building Materials, etc.)

**Road Construction.**—Highway Dept., State Board of Engrs., Frank M. Kerr, Chief Engr., New Orleans, La.—Bids until Feb. 2 to construct public highway from New Iberia to St. Martin's parish line, distance of 4½ mi. Information on application to Highway Dept.

**Road Construction.**—Lincoln County Commrs., E. C. Norton, Secy., Star City, Ark.—Bids until Feb. 3 (extended date) to construct 13 mi. rock or gravel or gravel road in Dist. No. 1, Lincoln county; specifications, etc., obtainable at office of Dept. of State Highways and Improvements, New State House, Little Rock, Ark.; Hugh R. Carter, State Highway Engr., is engineer for district.

**Road Construction.**—Clerk's office, Clintwood, Va.—Bids until Feb. 2 to grade 1¼ mi. earth road in Dickinson county between Clintwood and mouth of McClure River; plans and specifications at Clerk's office and office of G. P. Coleman, State Highway Commr., Richmond, Va.

**Road Machinery.**—W. B. Boyd, Warrenton, N. C.—Prices on road-building machinery.

**Road Machinery.**—V. A. Miller, Secy., Special Com. for road improvements, Lake Charles, La.—Will want data and prices on road and ditching machines, road construction, etc., for road work.

**Roofing.**—See Building Materials.

**Roofing.**—Lynnhurst Cottage Sanitarium, Dr. A. C. Watts, owner, R. F. D. No. 7, Birmingham, Ala.—Prices on roofing for 10 2-room cottages. (See Building Materials.)

**Roofing.**—Wise Granite Co., Richmond, Va.—Prices on roofing for \$186,000 postoffice building at Winston-Salem, N. C. (See Building Materials.)

**Sausage Machinery.**—Consolidated Beef & Provision Co., 104 S. Exeter St., Baltimore, Md.—Sausage Machinery. (See Packing Plant Equipment.)

**Separator.**—Merrill B. Parker, Tallapoosa, Ga.—Correspondence with manufacturers of equipment to separate iron from blast furnace slag.

**Septic Tanks, etc.**—Hickory Land & Development Co., Hickory, N. C.—Data on septic tanks and other methods of sewage disposal for communities.

**Sewers.**—Sewer Improvement Dist. No. 1, W. L. Jeffries, Chmn., Clarendon, Ark.—Probably let contract in about 90 days to construct sewer system; Winters & Dove, Engrs., Fort Smith, Ark., preparing plans and specifications.

**Sewers.**—Engineering Dept., E. E. Sands, City Engr., Houston, Tex.—Bids until Jan. 23 to construct sanitary lateral sewers on McKinney Ave. from York to Chartres Sts.; cost \$17,500; also sanitary sewer on Austin St. from Anita to Elgin Sts., etc.; cost \$5000.

**Sewers.**—City, E. E. Sands, City Engr., Houston, Tex.—Bids until Jan. 24 to construct storm sewer on Bryan St. from Garrow to German Sts.; cost \$7000.

**Sewer Piping, etc.**—Board of Awards, Jas. H. Preston, Prest., Baltimore, Md.—Bids until Jan. 28 at office of City Register,

City Hall, to lay cast-iron pipe line at Sewerage Disposal Works, Sanitary Contract No. 130; work will include 53 tons cast-iron pipe and special castings, 400 cu. yds. excavation and 50 cu. yds. embankment; Calvin W. Hendrick, Chief Engr.; plans and specifications at office Sewerage Com., 904 American Bldg.

**Shafting.**—National Interior Finish Co., E. M. Byrne, Jr., Box 395, Huntington, W. Va.—Prices about Feb. 10 for shaft hanger and following sizes of turned shaftings: 3 7-16 in., 2 15-16 in. and 1 15-16 in.

**Steam Shovels.**—Willburn Hill and A. Brown, Attalla, Ala.—Data, catalogues and prices on steam shovels. (See Contractors' Equipment.)

**Steel Cars.**—Commr. of Fisheries, Dept. of Commerce, Washington, D. C.—Bids until Feb. 16 to construct 2 steel cars. For blank proposals, plans and particulars address Commr.

**Steel Ranges, Refrigerators, etc.**—Navy Dept., Bureau of Supplies and Accounts, T. J. Cowie, Paymaster-Gen., Washington, D. C.—Bids until Feb. 3 to furnish quantity of steel ranges and refrigerators, schedule 6261, delivery Navy-yard, Pensacola, Fla.; iron and brass valves and portable baskets for open fireplace, schedule 6262, delivery Navy-yard, Annapolis, Md.; white and red lead, metallic zinc, schedule 6249; galvanized sheet steel, schedule 6261; pine tar oil, schedule 6269; delivery Navy-yard, Norfolk, Va.; for copies of schedules apply navy pay office nearest navy-yard.

**Thread.**—Navy Dept., Bureau of Supplies and Accounts, T. J. Cowie, Paymaster-Gen., Washington, D. C.—Bids until Feb. 10 to furnish 2000 spools machine twist silk thread, schedule 6286; delivery Navy-yard, Norfolk, Va.; for copies of schedules apply to navy pay office nearest navy-yard.

**Tile.**—See Building Materials, etc.

**Tracks and Trucks.**—H. M. Wade Mfg. Co., Charlotte, N. C.—Steel tracks and trucks for dry-kiln.

**Steam Shovel.**—Eastern Rwy. Supply Co., 413 American Bldg., Baltimore, Md.—No. 0 Shovel for quick delivery.

**Straw Sewing Machinery.**—Savannah Woodenware Co., Savannah, Ga.—Addresses of manufacturers of machinery for sewing straw on wine bottles.

**Vault.**—See Bank Fixtures, etc.

**Water-works.**—Water-works Improvement Dist. No. 1, W. L. Jeffries, Chmn., Clarendon, Ark.—Probably let contract in about 90 days to construct water-works; Winters & Dove, Engrs., Fort Smith, Ark., preparing plans.

**Well-drilling, etc.**—Navy Dept., Bureau of Supplies and Accounts, T. J. Cowie, Paymaster-Gen., Washington, D. C.—Bids until Feb. 10 for well-drilling, casing and testing at Gambrells, Md.; schedule 6297; for copies of schedules apply to navy pay office nearest navy-yard.

**Well-drilling Equipment.**—Nigger Creek Oil & Gas Co., Gordon White, Secy., Vian, Okla.—Prices on standard drilling rigs.

**Whistles (Electric).**—City of Opelousas, La., A. C. Jones, Supt.—Data and prices on electric fire whistles.

**Wire.**—Geo. L. Smith, Cadiz, Ky.—Prices on 3 mi. copper wire, Nos. 6 and 8.

## FINANCIAL NEWS

The MANUFACTURERS RECORD invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

### United States Fidelity.

The statement of the United States Fidelity & Guaranty Co. for the year 1913 shows total income, \$6,636,277.94; excess of income over disbursements, \$805,411.36; surplus after dividends, \$214,812.23; which, added to surplus a year ago, makes total surplus of \$1,496,190.53. Deducting from this increase in claim reserves leaves the net surplus as \$908,713.90. Total assets are now \$7,900,368.47, an increase of \$427,894.77. Premiums written during the year were \$6,

295,907.97, an increase of \$851,148.47 as compared with 1912.

### Bank Reports.

First National Bank, Birmingham, Ala., reports Jan. 13, 1914, loans and discounts, \$9,347,331; total cash, \$3,981,417; capital stock, \$1,500,000; surplus and profits, \$1,667,920; circulation, \$1,350,000; total deposits, \$11,647,103; total resources, \$16,165,023; W. P. G. Harding, president; J. H. Woodward, J. H. Barr, vice-presidents; Thomas Hopkins, cashier; Thomas Bowron, F. S. Foster and J. K. Fleming, assistant cashiers; J. E. Osburn, secretary savings department; J. L. Cross, auditor.

### FINANCIAL CORPORATIONS

Ark., Ashdown.—First National Bank of Ashdown, which succeeds Little River County Bank, chartered; capital \$25,000; surplus \$25,000. Organizers: J. H. Wallace, Saratoga, Ark.; N. C. McCrary, Richmond, Ark.; J. T. Cawling, A. Goldsmith, H. L. Toland, A. J. Russell, W. T. Locke, C. S. Cabe and R. E. Major, all of Ashdown. Business is to begin about Jan. 25.

Ark., Helena.—New bank capitalized at \$25,000 is being organized at West Helena.

Ark., Heber Springs.—Chartered: Arkansas Land, Loan & Investment Co.; capital \$100,000; P. H. Walker, Prest.; J. F. Williams, V.-P.; S. E. Harrison, Secy.-Treas.

Ark., Stuttgart.—Chartered: Stuttgart Building and Loan Assn.; capital \$500,000, of which \$250,000 has been subscribed; George C. Lewis, Prest.; J. I. Porter, V.-P.; C. H. Denslow, Secy., and First National Bank of Stuttgart, Treas.

Fla., Live Oak.—Exchange Bank & Trust Co. has begun business in the Barnett Bldg., Cor. Adams and Laura Sts.; capital \$300,000; surplus, \$200,000; W. H. Milton, Prest.; Clifford R. Allen, V.-P. and trust officer; J. A. McLaurin, 2d V.-P.; Daniel A. Simmons, Secy., and Chas. S. Adams, Gen. Counsel.

Ga., Macon.—Macon Investment Co., capital \$10,000, has applied for charter; petitioners, M. H. Harman, W. T. Willford, W. R. Rogers, Jr., Eden Taylor, Jr., and Geo. W. Gantt, Jr.

Ga., Macon.—People's Health & Life Insurance Co. has filed application for charter. Petitioners: O. M. Hall of Gordon, Ga., and R. E. Hartley, G. W. Banks, C. Richmond, S. A. Matthews, C. E. Moore, A. S. Williams, J. R. Webb, F. W. J. Disroon and Frank Hubbard, all of Macon.

La., St. Francisville.—First National Bank of St. Francisville is organized with \$25,000 capital. Among those interested are Judge J. L. Golsan and E. Robinson.

Miss., Brookhaven.—First National Bank is organized with \$100,000 capital. Among those said to be interested are Lynn H. Dinkins, New Orleans, Prest. of the Interstate Trust and Banking Co.; J. B. Stirling, Prest. First National Bank of Jackson, and P. H. Saunders, Prest. of the Commercial Bank & Trust Co. of Laurel. It is also stated that the new institution will absorb the Merchants and Farmers' Bank.

Mo., Booneville.—Chartered: Cooper County Building and Loan Assn.; capital \$300,000; incorporators, A. A. Wallace, J. S. Davis, J. C. Piggott and others.

Mo., Emma.—Chartered: Bank of Emma; capital \$30,000. Among the stockholders are Louis Dierker, William F. Dierker, B. A. Hoelscher, John G. Bredehaft, Marvin Evert, Martin L. Hemme and H. Fricke.

Mo., St. Louis.—Water Tower Bank, capital \$100,000, is being organized with following directors: Otto G. Koenig, L. Wellingshoff, Dr. T. L. Pepperling, J. F. Horstman, R. A. Perkins, F. A. Langan, S. G. Stickney and S. B. Jeffries. Offices will be at 2100 East Grand Ave.

N. C., Oakboro (not a P. O.).—Bank of Oakboro, authorized capital \$10,000, is organized by C. C. Turr, C. E. Hill, C. J. Black, J. C. Thomas, H. E. Vaughan, H. P. Efrd, J. M. Hayward, Big Lick; J. A. Parker, Olive Branch; H. B. Marsh, C. B. Covington, Marshville.

N. C., Valle Crucis.—Valle Crucis Bank of Watauga county commissioned; capital \$5000 paid in; L. D. Lowe, Prest.; L. M. Farthing, Cash.

Okla., Beggs.—Farmers' National Bank of Beggs, to succeed the Farmers' State Bank of Beggs, has made application to organize; capital \$25,000.



Okla., Fairland.—First National Bank of Fairland has made application to organize; capital \$25,000; organizers, N. C. Gallemore, M. J. Campbell, J. H. Connolly, F. Gaines and J. A. Moore. This succeeds Bank of Fairland.

Okla., Crawford.—Crawford State Bank, which takes over the Crawford Cotton Exchange Bank, is chartered and inceptd.; capital \$10,000; J. W. Cooper, Prest.; D. Jackson, V.-P.; Cheyenne, Okla.; C. L. Barton, Cash.; Crawford. Business began Jan. 3.

Okla., Nowata.—Citizens' State Bank inceptd.; capital \$25,000. Directors: B. H. Robertson, Prest.; J. Wood Glass, V.-P.; M. R. Garnett, Cash.; H. G. Cheney and Paul Lovell. Business is to begin Jan. 2.

S. C., Bamberg.—Panama Canal Bank is being organized, capital to be not less than \$25,000 nor more than \$50,000; petitioners, H. M. Graham and C. E. Black.

S. C., Charleston.—City Investment Co. of Charleston commissioned; capital \$15,000; petitioners, T. T. Hyde, J. A. Storer and G. H. Moffett.

S. C., Charleston.—Realty Investment Co. commissioned; capital \$10,000; petitioners, T. T. Hyde, W. H. Mixson and George H. Moffett.

S. C., Conway.—Horry County Trust Co. inceptd., capital \$5000, has begun business; W. W. Russ, Prest.; W. Percy Hardwicke, V.-P.; L. D. Magrath, Gen. Mgr., Secy. and Treas.; Dr. J. A. Norton, Dr. J. C. Dusenbury; A. M. Southerland, W. Boyd Jones and E. W. Snow, directors.

Tenn., Covington.—First National Bank of Covington, capital \$50,000, has applied for charter; organizers, A. P. Smith, L. P. Philip, Alfred Boyd, Jr., I. H. Lowenhaupt and E. L. Worrell.

Tenn., Livingston.—Citizens' Bank & Trust Co. inceptd.; capital \$20,000. Organizers: W. R. Officer, Jno. A. Hargrove, John Young, C. J. Cullom, W. J. Cullom, T. B. Copeland, Ben Bowman, B. C. Cullom, Young Cullom, Mary Officer, J. W. Henson, all of Livingston; Irving Alfred, West Fork; M. E. Ledford, J. M. Copeland, Nettle Carrier, Bedford Arnold, Carver McCarmack, Livingston, Tenn., and others. Business is to begin early in February.

Tex., Chriesman.—First State Bank of Chriesman is authorized to do business; capital \$10,000.

Tex., Dallas.—L. L. Henderson and C. B. Gillespie are organizing a new bank and trust company, capital to be not less than \$200,000. Temporary headquarters 111 Field St.

Tex., Dallas.—Chartered: Wood Investment Co., capital \$25,000; incorporators, A. B. Wood, Thomas H. Hopkins and Geo. T. Hughes.

Tex., Houston.—Fidelity Trust Co. inceptd.; capital \$100,000; surplus \$25,000; J. S. Cullinan, Prest.; Jas. L. Autry and W. C. Hogg, V.-Ps.; B. W. Ward, Secy. Business has begun.

Tex., Jasper.—Chartered: Citizens' National Bank; capital \$25,000.

Tex., Linden.—Chartered: First National Bank; capital \$35,000; C. E. Davis, Prest.; S. H. Vance, Cash.

Tex., Odem.—First State Bank is organized; capital \$25,000; D. Odem, Prest.; J. W. Taylor, C. C. Smith and J. D. Williams, directors. Business will begin as soon as charter is received.

Tex., Sulphur Springs.—Guaranty State Bank & Trust Co. organized; capital \$75,000. Business will begin about Feb. 10 with following directors: D. Thornton, Prest.; W. B. Loving and J. H. Holloway, V.-Ps.; A. B. Ewing, Cash.; J. W. Hunt, Asst. Cash.; Theo. Wester and J. B. Thomas.

Va., Portsmouth.—Mutual Savings Bank inceptd., capital \$10,000 to \$25,000; J. F. Riddick, Prest.; R. J. Kyles, Secy.

Va., Roanoke.—Shenandoah Life Insurance Co. is organized with \$500,000 capital; Col. John T. Boone is principal promoter; Colonial Organization Corporation, 116 Campbell Ave., fiscal agents.

## NEW SECURITIES

Ark., Hardy.—Board of Directors, Hardy School Dist., has floated \$15,000 6 per cent. 26-year school-building bonds.

Ark., Harrison.—Gunter & Sawyers, Little Rock, purchased at 97½ net to District, \$10,000 6 per cent. 20-30-year School Dist. ward school bonds; denomination \$500; dated Feb. 1, 1914; R. M. Fellows, Secy. School Board.

Ark., Newport.—W. R. Compton & Co. and Hoeler & Cummings purchased on Jan. 6 at 96.35 the \$90,000 6 per cent. bonds of Overcup Slough Drainage Dist.; dated Feb. 1, 1914;

maturity 1919-1934; Jones & Campbell, attorneys.

Ark., Rogers.—\$6000 refunding and \$30,000 school 5 per cent. 20-40-year bonds Rogers Independent School Dist., voted last April, are not yet ready for sale, there being a little hitch in the matter. Bonds are dated May 10, 1913; maturity 1933, optional 1933; denomination \$1000; M. V. Baugh, Prest. School Board.

Ark., Texarkana.—The \$200,000 Garland Levee Dist., Miller county, bonds, for which bids are asked until noon Feb. 5, are 10-20-year 6 per cents; J. D. Williams, Secy. of Board.

Fla., Arcadia.—De Soto county recently voted \$200,000 road bonds. Address County Comms.

Fla., Arcadia.—County Board of Public Instruction will receive bids until noon Feb. 14 for the following special tax school district 5 per cent. 30-year De Soto county bonds: \$75,000 Arcadia Special Tax School Dist. No. 1; \$25,000 Wauchula Special Tax School Dist. No. 5; \$25,000 Avon Park Special Tax School Dist. No. 3; J. O. Bickley, County Supt. and Secy. Further particulars will be found in the advertising columns.

Fla., Bradentown.—Bids will be received until 7.30 P. M. Feb. 16 by City Council, William Kean, City Clerk, for \$55,000 5 per cent. 20-30-year improvement bonds; dated Feb. 1, 1914; denomination \$500. Further particulars will be found in the advertising columns.

Fla., De Land.—Preliminary steps are being taken to issue \$200,000 of bonds for street improvements, sewerage, gas plant, etc. Address The Mayor.

Fla., Fort Myers.—Bids received by D. W. Sumner, City Clerk, for \$30,000 5 per cent. 20-year municipal street and sidewalk bonds; dated July 2, 1913; maturity, July 2, 1933; denomination \$1000. Further particulars will be found in advertising columns.

Fla., St. Petersburg.—John Nuveen, Chicago, recently purchased \$65,000 of school bonds. Dixie M. Hollins is Supt. Schools, Pinellas county.

Fla., Tampa.—Jan. 22 Dist. No. 17 will vote on \$13,000 school bonds. Address Board of Education.

Fla., West Palm Beach.—Sidney Spitzer & Co., Toledo, recently purchased at \$167 premium \$13,500 6 per cent. 20-year bonds Special Tax School Dist. No. 5, Palm Beach county. H. W. Lewis, Supt. Public Instruction.

Ga., Atlanta.—The municipal finance committee is considering a proposition to issue \$5,000,000 of bonds. W. G. Humphrey is Chrmn.

Ga., Lagrange.—J. D. Edmundson, Mayor, is offering at private sale \$150,000 4½ per cent. water bonds; denomination \$1000; dated Jan. 1, 1913; maturity 1929 to 1943; T. J. Harwell, Clerk and Treas.

Ga., Moultrie.—Voted: \$36,000 paving, \$20,000 school and \$4000 sewerage bonds; Geo. R. Kline, Mayor.

Ga., Savannah.—Bids are reported opened by the city for \$600,000 of 4½ per cent. 30-year sewer bonds, the highest bidders being New York Life Insurance Co., \$250,000 at 101.574; R. M. Marshall & Bro. of Charleston, \$65,000 at 101; Security Trust Co. of Spartanburg, \$600,000 at 100.525; Townsend Scott & Son of Baltimore, \$600,000 at 100.11; J. L. Hammond & Co. of Savannah, \$100,000 at 100.375. Awards not yet announced.

Ga., Thomasville.—Steps are being taken to issue \$65,000 building bonds. Address The Mayor.

Ga., Williamson.—Voted: \$6000 6 per cent. Williamson School Dist., Pike county, school-building bonds. Address County Comms.

Ky., Elkton.—An election will probably be called in Todd county to vote on \$190,000 road bonds. Address County Comms.

Ky., Taylorsville.—Bids will be received until noon Feb. 7 by John H. Reid, Mayor, for \$9000 6 per cent. water-works bonds. Denomination \$450; dated March 1, 1914; maturity, \$450 March 1, 1915 to 1934.

La., Hammond.—Voted: \$50,000 schools, \$18,000 water-works, \$16,000 sewerage, \$5000 fire equipment, \$3000 city hall and jail 5 per cent. 40-year bonds. John W. Skinner is Mayor and Columbus Reid City Secy.

La., St. Bernard.—Election is soon to be held in St. Bernard parish to vote on \$100,000 5 per cent. courthouse bonds; denomination \$1000. Address Police Jury.

La., Ville Platte.—A. A. Laverne, Mayor, will receive bids at once for \$15,000 5 per cent. water-works construction bonds; denomination \$500; dated July 1, 1913.

La., Vivian.—City contemplates issuing \$40,000 school bonds. Address The Mayor.

Md., Williamsport.—Steps are being taken

to issue bonds for water-works and electric lights. Address Town Comms.

Miss., Hazlehurst.—Capitol National Bank, Jackson, has purchased at \$260 premium \$25,000 6 per cent. bonds Road Dist. No. 1, Copiah county. R. B. Greenlee is Prest. Board of Suprvs.

Miss., Laurel.—D. A. Scarborough, City Clerk, will receive bids until Jan. 26 for \$40,000 5 per cent. 20-year street-improvement and municipal building bonds.

Miss., Port Gibson.—Chas. S. Kidder & Co., Chicago, have purchased at 100.17 and interest \$10,000 5 per cent. 20-year Claiborne county bridge bonds. Address County Comms.

Mo., Alton.—Election is to be held in April to vote on \$150,000 city hall and \$10,000 house-hold bonds.

Mo., Dexter.—Wm. R. Compton & Co., St. Louis, have purchased at par \$28,000 water-works and \$25,000 sewer 5 per cent. bonds. Address The Mayor.

Mo., Sedalia.—N. W. Halsey & Co. were awarded the \$32,000 5 per cent. 20-year school district building bonds at \$1040 premium. A. W. McKenzie, Secy., Board of Education.

N. C., Beaufort.—The \$10,000 Taylor's Creek improvement bonds, for which bids are asked until 5.30 P. M. Feb. 3, mature in 1941; denominations \$100 to \$1000. C. S. Maxwell, Clerk.

N. C., Carthage.—Hanchett Bond Co., Chicago, has purchased \$6000 6 per cent. water-works bonds; dated Dec. 1, 1913; maturity Dec. 1, 1943. Address The Mayor.

N. C., Charlotte.—Mayer, Deppe & Walter, Cincinnati, are reported to have purchased \$75,000 6 per cent. street-paving assessment bonds. Chas. A. Bland is Mayor.

N. C., Dobson.—Bids are being received for \$33,000 water and \$7000 sewerage 6 per cent. bonds voted Jan. 10, 1914; denomination \$1000; maturity 1944; W. S. Gough, Chrmn. Board of County Comms., Dobson, N. C.

N. C., Goldsboro.—Goldsboro township has sold \$25,000 road bonds. Address Road Commissioners.

N. C., Goldsboro.—Tillotson & Woolcot Co., Chicago, has been awarded at par, \$570 premium and accrued interest at time of delivery \$80,000 of the \$103,000 5 per cent. municipal bonds offered Jan. 15. The remaining \$23,000 will be sold later. D. J. Broadhurst is City Clerk.

N. C., Holly Springs.—The \$10,000 of high-school bonds to be voted on Feb. 17 are 30-year 6 per cents. Address Board of County Comms., Wake county, Raleigh, N. C.

N. C., Macon.—Sidney Spitzer & Co., Toledo, O., were the purchasers of the \$30,000 40-year Warren township, Warren county, road bonds. P. M. Stallings, Chrmn. Board of County Comms.

N. C., Marshall.—Bids received until noon Feb. 2 by W. C. Sprinkle, Chrmn. Comms. Madison County, for \$100,000 of an authorized issue of \$300,000 5 per cent. 30-year road bonds; dated Jan. 1, 1914; denomination \$1000.

N. C., Matthews.—Hanchett Bond Co., Chicago, has purchased \$12,000 6 per cent. 20-year school district bonds. Address Dist. Comms.

N. C., Newbern.—Bids will be received until noon Feb. 3 for \$20,000 5 per cent. 30-year public graded school bonds; denomination not more than \$1000 nor less than \$100. F. T. Patterson, City Clerk.

N. C., Raleigh.—Defeated: \$50,000 5 per cent. 30-year Raleigh township, Wake county, school bonds. John A. Mills is Chrmn. Board of County Comms.

N. C., Snow Hill.—\$10,000 6 per cent. 30-year electric-light bonds have been purchased by the Hanchett Bond Co., Chicago.

N. C., Snow Hill.—Bids received until noon Feb. 2 for \$110,000 Township and Road Dist., Greene County, road-improvement bonds as follows: \$20,000 Snow Hill township 20-year 5 per cents; \$20,000 Olds township 40-year 5 per cents; \$20,000 Ormonds township 40-year 5 per cents; \$10,000 Shine township 30-year 5 per cents; \$10,000 Jason township 40-year 5 per cents; \$10,000 Hookerton Road Dist. 15-year 6 per cents; J. O. Sugg, clerk Board Com. Greene County. Further particulars will be found in the advertising columns.

N. C., Shelby.—Election is to be called in Cleveland county to vote on \$40,000 railroad bonds. Address County Comms.

N. C., Statesville.—J. H. Hillsman & Co., Atlanta, recently purchased \$8000 5 per cent. 25-year refunding electric-light and \$10,000 5½ per cent. 1-10-year street-improvement bonds. Address The Mayor.

N. C., Sylva.—Town proposes to issue \$12-

000 to \$15,000 bonds for paying for site of public buildings, and from \$30,000 to \$50,000 bonds for installation of water-works, sewer system, paving and sidewalks. Address The Mayor.

N. C., Tarboro.—In the spring Edgecombe county proposes to place on the market \$40,000 of an issue of \$200,000 road and bridge bonds. Address County Comms.

N. C., Warrenton.—A Toledo firm has been awarded \$30,000 5 per cent. 40-year township road bonds. Address Township Road Commissioners.

N. C., Waynesville.—Nov. 15 city voted \$20,000 5 per cent. 30-year sewer bonds; denomination \$1000. Date for opening bids not yet decided. C. H. Ray, Mayor.

N. C., Wendell.—Bids will be received by J. A. Wall, Clerk of Board of Town Comms., until noon Feb. 16 for \$15,000 5 per cent. 30-year electric-light plant bonds. W. H. Rhodes, Mayor. Further particulars will be found in the advertising columns.

N. C., Whiteville.—Sidney Spitzer & Co., Toledo, O., have purchased \$50,000 of the \$100,000 5 per cent. 30-year Columbus county courthouse bonds. Address Board of County Comms., C. C. Pridgen, Chrmn.

N. C., Wilmington.—Mch. 5 election is called to vote on \$150,000 of bonds for acquiring municipal docks and wharves. Address The Mayor.

N. C., Yanceyville.—Board of County Commissioners has ordered special election to be held Feb. 17 in Dan River, Anderson, Yanceyville and Stony Creek townships, Caswell county, to vote on railroad-aid bonds.

Okla., Devol.—E. R. Kirby purchased at par in contract for water-works \$15,000 6 per cent. water-works bonds; denomination \$500; dated Jan. 1, 1914; maturity Jan. 1, 1939; W. T. Huff, Town Clerk.

Okla., McAlester.—Commissioners Pittsburg county are granted authority to issue \$21,275 of bonds to take up outstanding warrants.

Okla., Okemah.—At 8 P. M. Jan. 26 town will offer for sale in the Council Chamber \$25,000 6 per cent. 25-year water-works extension bonds. C. J. Holloway, Prest.; Otis L. Snow, Clerk.

Okla., Stigler.—Voted: \$6000 sewerage and \$6000 water bonds. Address The Mayor.

Okla., Valliant.—Baum & Davis purchased at \$36,750 the \$36,000 6 per cent. 25-year water-works system bonds voted Aug. 12, 1913; denomination \$1000; dated Aug. 12, 1913; maturity Aug. 12, 1938. R. T. Wilson, Prest. Board of Trustees.

Okla., Wewoka.—Black Hammock Drainage Dist., Seminole county, is reported to have sold, at par, \$45,000 of bonds. Address Dist. Comms.

S. C., Columbia.—Feb. 24 election is to be held to vote on \$500,000 water and sewerage extension bonds. Address The Mayor.

S. C., Fort Mills.—Steps are being taken to issue bonds for water-works. Address Town Council.

S. C., Orangeburg.—Security Trust Co. has purchased \$60,000 5 per cent. 20-40-year water and light bonds at \$460 premium. R. F. Bryant is Mayor.

Tenn., Cleveland.—Bids received until noon Jan. 30 by Thomas E. Thatch, Mayor, for \$75,000 5 per cent. sewer bonds.

Tenn., Cleveland.—Bids will be received until noon Jan. 30 by C. F. Carter, City Recorder, for \$75,000 5 per cent. 5-25-year sewer bonds; denomination \$500.

Tenn., Dayton.—It is proposed to hold an election in Rhea county to vote on \$250,000 pike bonds. Address County Comms.

Tenn., Dover.—Motion has been put before the County Court of Stewart county that an election be held in November to vote on \$100,000 pike bonds.

Tenn., Dresden.—For next 30 days \$27,000 6 per cent. 20-year municipal water and light bonds are being offered; R. L. Suddath, Mayor. Further particulars will be found in the advertising columns.

Tenn., Dunlap.—Sequatchie county, it is reported, proposes to issue \$5000 school-improvement bonds. Address County Comms.

Tenn., Manchester.—Coffee county contemplates issuing good-roads bonds. Address County Comms.

Tex., Alpine.—Brewster county recently voted \$85,000 6 per cent. road bonds. Address County Comms.

Tex., Austin.—Attorney-General has approved following securities: \$4000 5 per cent. 20-year bonds Hardin County Common School Dist. No. 4; \$4000 5 per cent. 5-40-year bonds Arlington Independent School Dist., Tarrant

[For Additional Financial News, See Page 72.]



**Merchants-Mechanics National Bank**

South and Water Sts. BALTIMORE MD  
DOUGLAS H. THOMAS President.  
JNO. B. RAMSAY V.-P and Chm. Bd. of Dir.  
WM. INGLE Vice-President.  
JOHN B. H. DUNN Cashier.  
Capital \$2,000,000 Deposits \$21,670,000  
Surplus and Profits \$2,175,000  
Accounts of Banks, Bankers, Corporations and Individuals solicited  
We invite correspondence.

**Southern Steam  
Railroad Securities**  
DEALT IN

**F. J. LISMAN & CO.**

Specialists in Steam R. R. Securities  
Members New York Stock Exchange  
30 Broad Street NEW YORK  
39 Pearl Street, Hartford  
Land Title & Trust Bldg., Philadelphia

**The First National Bank**  
OF KEY WEST, FLA.

United States Depository and Disbursing Agent  
Capital and Undivided Profits - - \$100,000  
Surplus - - - - - 40,000  
A general banking business transacted  
Special attention given to collections

**Delaware Trust Company**  
Wilmington, Delaware

INCORPORATING under broad, liberal, safe and stable Delaware laws. A fully equipped department for proper organization and registration of corporations.  
BANKING AND TRUST department gives special attention to out of town customers accounts.  
TITLE DEPARTMENT examines and guarantees title to realty throughout Delaware.  
REALTY DEPARTMENT has sites for manufacturing industries. Modern Methods of management of property.  
J. ERNEST SMITH, President and Gen. Counsel.  
WM. G. TAYLOR, Vice-Pres. and Treasurer.  
HARRY W. DAVIS, Vice-Pres. and Secretary.  
W. W. PUSEY 2d, Title and Real Estate Officer.

**JOHN NUVEEN & CO.**

First National Bank Building  
CHICAGO  
We purchase SCHOOL, COUNTY and MUNICIPAL BONDS. Southern Municipal Bonds a Specialty.  
Write us if you have bonds for sale.

**INVESTMENT SECURITIES**

Southern Stocks and Bonds  
Municipal and Corporation  
Cotton Mill Stock a Specialty  
WM. S. GLENN, Broker, SPARTANBURG S. C.

**Federal Sales & Service Company**

MUNSEY BUILDING WASHINGTON, D. C.

Agents for Government Contractors

We solicit the representation of manufacturers—those now doing business with the Government and others who desire representation. Long and successful experience in this branch of work.

**To Manufacturers and Capitalists**

Contemplating the Establishment of Industrial Enterprises

Attention is called to the exceptionally favorable location of

**NEWPORT NEWS, VA.**

on Hampton Roads, fifteen miles from the sea. Deep water, railway and sea transportation facilities unrivaled. Climate salubrious. Apply to

W. B. LIVEZEY, President

OLD DOMINION LAND COMPANY  
NEWPORT NEWS, VA.

**Capital for Southern Industries****Peabody, Houghteling & Co.**

(Established 1885)

10 So. La Salle Street

CHICAGO, ILLINOIS

H. B. Wilson, Pres. Blanchard Randall, V.-Pres.  
Wm. S. Hammond, Cashier  
Saml. W. Tschudi, A. Cash. R. E. Bolling, A. Cash.

**The First National Bank**

17 South St., Baltimore, Md.  
Capital - - - - - \$1,000,000  
Surplus and Net Profits - - - 400,000  
Deposits - - - - - 6,500,000

Especially well equipped to handle the business of Southern Banks, Corporations, and Individuals and Manufacturers. We cordially invite correspondence and interviews.

**The National Exchange Bank**  
OF BALTIMORE, MD.

Hopkins Place, German and Liberty Streets  
Capital, \$1,000,000  
August 9th, 1913, Surplus and Profits, \$764,091.00  
OFFICERS

WALDO NEWCOMER, President.  
SUMMERFIELD BALDWIN, Vice-Pres.  
R. VINTON LANSDALE, Cashier.  
C. G. MORGAN, Asst. Cashier.  
Accounts of Mercantile Firms, Corporations, Banks, Bankers and Individuals invited.

**FIRST NATIONAL BANK**  
RICHMOND, VIRGINIA

Capital and Surplus - - - \$3,000,000  
JNO. B. PURCELL, President  
JNO. M. MILLER, Jr., Vice-Pres.  
W. M. ADDISON, Cashier  
W. M. HABLSTON, Chairman of Board.

Edwin Warfield, President

**Fidelity and Deposit Company**  
of Maryland

Home Office: Baltimore

Total Assets over \$11,000,000.00

All Kinds and Classes of Surety Bonds and Casualty Insurance

Largest and Strongest Surety and Casualty Company in the World

**WE BUY**

CITY COUNTY SCHOOL  
AND DRAINAGE  
BONDS

From Municipalities  
and Contractors

The Tillotson & Wolcott Co.  
CLEVELAND, OHIO

**We Finance**

Electric Light, Power and Street Railway Enterprises  
With Records of Established Earnings

**We Offer**

Bankers and Investment Dealers  
Proven Public Utility Securities  
Correspondence Solicited

**Electric Bond and Share Company**

(Paid-up Capital and Surplus, \$12,000,000)

71 Broadway

New York

**Palmetto National Bank**

COLUMBIA, S. C.

Capital  
\$250,000.00

Deposits  
\$2,700,000.00

Surplus and Profits  
\$150,000.00

WILLIE JONES, President  
JOHN JACOB SEIBELS,  
Vice-President  
THOMAS TAYLOR  
2nd Vice-President

J. P. MATTHEWS, Cashier  
WM. M. GIBBES, Jr.,  
Asst. Cashier  
WESTON & AYCOCK,  
Solicitors

Direct daily connection with every banking point in South Carolina.

**COTTON YARNS****Paulson, Linkroom & Co.**

COMMISSION MERCHANTS

NEW YORK  
87-89 Leonard Street

PHILADELPHIA  
130 Chestnut Street

CHICAGO  
206 S. Market Street

**CHECK BOOKS**

Look at the imprints on checks passing through your office. If you are south of Mason and Dixon's Line and East of the Mississippi River, you will find more of our imprints than of any other. Of course there is a good reason.

When needing check books consult

**Young & Selden Co.**

BANK STATIONERS BALTIMORE, MD.

Lithographing, Printing, Envelopes  
Blank Book Makers, Book Binding  
Letter Heads, Office Supplies  
Steel Die Work

**GO SOUTH!**

FOR SALE Timber, Coal, Iron, Ranch and Other Properties  
Southern States, West Indies, Mexico  
SOUTHERN STATES DEVELOPMENT CO.  
(Brokers) Geo. B. Edwards, Pres.  
Tribune Building NEW YORK, N. Y.  
Confidential Negotiations, Investigations, Settlements, Purchases of Property

**A \$1000 Mistake**

W. A. Lensing, Contractor, of Evansville, Ind., made \$1000 without investing a cent.

He figured an estimate on a large contract. Next day a Burroughs man showed him how the Burroughs Adding Machine does all kinds of figuring without errors, and in one-fifth the time.

Just "to see the machine do it," Mr. Lensing used the Burroughs to re-figure the estimate and found a \$1000 mistake.

He bought a Burroughs. Honestly now—did you ever make a costly mistake in figures? Shall we send over a machine to figure your estimates—just to try out?

**Burroughs Adding Machine Co.**

80 Burroughs Block, Detroit, Michigan

**We Buy City, County School and Drainage BONDS**

FROM MUNICIPALITIES OR CONTRACTORS

We are in position to pay HIGHEST PRICES. Write or wire us your offerings.

The New First National Bank, Assets, \$6,000,000 Columbus, Ohio

28 YEARS' ACTIVE SERVICE

STATE, CITY AND CORPORATION FINANCING  
Entire Issues Bought and Sold

**Mercantile Trust & Deposit Company**

OF BALTIMORE

Capital - - - - - \$1,500,000  
Surplus - - - - - \$3,000,000

Thoroughly organized to exercise all Banking and Trust Company functions.  
Correspondent for Banks and Trust Companies.

A. H. S. POST - - - President

county; \$800 5 per cent. 5-20-year bonds Leon County Common School Dist. No. 39; \$2000 5 per cent. Wharton water-works bonds; \$1200 5 per cent. 10-20-year bonds Kerr County Common School Dist. No. 5; \$14,300 6 per cent. Crystal City water-works bonds; \$1000 5 per cent. 10-20-year bonds Hall County Common School Dist. No. 5; \$6500 5 per cent. 10-40-year Crystal City street-improvement bonds; \$20,000 5 1/2 per cent. 20-40-year Mexia street-improvement bonds; \$8000 5 per cent. 10-20-year bonds Oldham County Common School Dist. No. 3; \$20,000 5 per cent. 10-40-year bonds Runge water-works and electric-light; \$5000 5 per cent. 5-40-year bonds Angleton Independent School Dist.; \$11,500 5 per cent. 10-40-year Teague water-works improvement bonds; \$1500 Dist. No. 101, and \$1000 Dist. No. 62 5 per cent. 5-20-year bonds Fannin Common School Dist.

Tex., Angleton.—Brazoria county has under consideration an issue of \$10,000 levee-improvement bonds. Address County Commissioners.

Tex., Belton.—Road Dist. No. 5, Bell county, has voted \$600,000 road bonds. W. S. Shipp is County Judge.

Tex., Belton.—Road Dist. No. 4, Bell County, has voted \$15,000 road bonds; W. S. Shipp, County Judge.

Tex., Channing.—Hartley county is reported to have sold \$15,000 5 per cent. 5-40-year school construction bonds. Address County Commrs.

Tex., Corpus Christi.—Hanchett Bond Co., Chicago, has purchased \$9000 improvement bonds.

Tex., Corsicana.—Bids will be received until 10.30 A. M. Feb. 2 by R. R. Owen, Judge of Navarro county, for \$400,000 5 per cent. road bonds.

Tex., Dallas.—Jan. 22 Dallas county will vote on \$125,000 5 per cent. 10-40-year viaduct and bridge bonds. Address Commrs.' Court.

Tex., Denton.—Feb. 21 Justices Precincts Nos. 1, 6 and 7, Denton county, will vote on \$300,000 road bonds. Address County Commissioners.

Tex., Elgin.—Feb. 17 election is called to vote on \$30,000 road and bridge bonds. Address The Mayor.

Tex., Fairfield.—Defeated: \$100,000 Teague Precinct and \$50,000 Road Dist. No. 2, Freestone county, bonds. Address County Commissioners.

Tex., Hillsboro.—All bids received Jan. 5 for the \$250,000 5 per cent. Precinct No. 1, Hill county, road bonds were rejected, and it is stated they will be sold to the first bidder who offers a satisfactory price for the issue. Judge J. D. Stephenson is County Judge.

Tex., Houston.—Hanchett Bond Co., Chicago, has purchased \$10,000 improvement bonds.

Tex., Houston Heights.—The \$200,000 sanitary sewerage and \$30,000 fire station and city hall bonds recently voted are 5 per cents. Address The Mayor.

Tex., Itasca.—Election is to be held in Itasca Road Dist., Hill county, Feb. 21 to vote on \$150,000 road bonds. Address County Commrs., Hillsboro.

Tex., Kaufman.—Voted: Street-improvement bonds. Address The Mayor.

Tex., Kingsville.—Commonwealth Trust Co., Houston, purchased on Dec. 30 \$125,000 courthouse and jail and 35,000 county hospital 5 per cent. 40-year bonds; denomination \$1000; dated Jan. 2, 1914. Address Ben F. Wilson.

Tex., Lockhart.—Caldwell county has sold to the Lockhart National Bank \$50,000 of road bonds. Address County Commrs.

Tex., McKinney.—Feb. 21 election is ordered to vote on \$125,000 of bonds Celina Good Roads Dist. No. 1, Collin county. Address County Commrs.

Tex., Pecos.—Jan. 24 election is called in Reeves county to vote on \$100 bonds Road Dist. No. 1. Address County Commrs.

Tex., Rock Springs.—Reported voted: \$15,000 School Dist. bonds. Address Dist. Commrs.

Tex., San Antonio.—Wm. R. Compton Co., Continental and Commercial Trust and Savings Bank Co., N. W. Halsey & Co., E. H. Rawlins & Son and A. B. Leach & Co., Chicago, purchased at \$10,950.75 premium and accrued interest \$1,000,000 Bexar county bonds. Address County Commrs.

Tex., San Marcos.—Hays county has under consideration question of calling election to vote on \$50,000 road bonds. Address County Commrs.

Tex., Stephenville.—Cutter, May & Co., Chicago, purchased at par \$44,000 5 per cent. 10-40-year school-building bonds Dublin School Dist. Address County Judge.

Tex., Sulphur Springs.—Voted: \$50,000 street improvement 5 per cent. 40-year bonds. K. T. Denton is Mayor.

Tex., Van Horn.—Culberson county has sold the \$20,000 6 per cent. county funding warrants offered Dec. 15. J. Y. Canon, County Judge.

Tex., Velasco.—People of Velasco and adjacent territory favor, it is reported, a \$16,000 bond issue to repair and strengthen Brazos River levee. Address Commrs. Velasco Drainage Dist.

Tex., Waco.—Feb. 14 election will be held in McLennan county to vote on \$1,075,000 road bonds. Address County Commrs.

Tex., Waco.—Feb. 16 election is called to vote on \$150,000 school building, \$65,000 street improvement, \$10,000 sewer, \$15,000 storm sewer, \$50,000 bridge and culverts and \$60,000 public park 5 per cent. 30-year bonds; denomination \$1000; dated Jan. 1, 1914. J. H. Mackey, Mayor.

Tex., Wellington.—Jno. Williamson, Secy. Board of Education, will receive bids for \$12,000 5 per cent. 10-40-year independent school district school construction bonds; denomination \$1000.

Tex., Wolfe City.—Wolfe City School Dist., Hunt county, has sold \$9500 5 per cent. 15-45-year school bonds. Address County Commrs., Greenville.

Va., Gate City.—Well, Roth & Co., Cincinnati, have purchased at par the following 5 per cent. 20-30-year Scott county road bonds: Estillville Magisterial Dist., \$100,000; Fulkerson Magisterial Dist., \$33,800; Johnson Magisterial Dist., \$33,300; J. F. Richmon is Clerk Board of Supervisors Scott County.

Va., Louisa.—Feb. 3 election is to be held in Louisa county to vote on \$50,000 bonds for improvement of roads and bridges in Mineral Magisterial Dist. Address Board of County Supvrs.

Va., Pulaski.—City has decided to issue \$10,000 light-plant bonds; also to call election to vote on \$12,500 school-improvement bonds. Address The Mayor.

Va., Richmond.—Election is to be held in North Richmond to vote on \$55,000 general-improvement bonds. Address The Mayor.

Va., Williamsburgh.—Election will probably be held in James City county in the near future to vote on \$25,000 Stonehouse and Powhatan school district bonds. Address County Commrs.

W. Va., Huntington.—Steps are being taken to issue about \$300,000 to \$400,000 of bonds for high school and additional ward school buildings. J. K. Oney, Secy., Board of Education.

W. Va., Huntington.—Bids will be received until Feb. 3 for \$100,000 4 1/2 per cent. 20-30-year Cabell county road-improvement bonds. Address Cabell County Court, D. I. Smith, Pres. Further particulars will be found in the advertising columns.

W. Va., Princeton.—Voted: \$500,000 5 per cent. 10-30-year Mercer county road bonds. E. L. Bowman, Clerk County Court.

W. Va., New Martinsville.—Bids will be received until Feb. 20 by L. E. Lantz, Secy. Board of Road Commrs. of Wetzel county, for \$50,000 6 per cent. 10-30-year road bonds.

W. Va., Jacksonburg.—L. E. Lantz, Secy. Board of Road Commrs. Wetzel county, will receive bids until Feb. 20 for \$50,000 6 per cent. 10-30-year road bonds.

W. Va., Wellburg.—Voted: \$16,000 5 per cent. water-works and fire-hose bonds; G. W. Rine, Mayor.

W. Va., Wheeling.—Election is to be held in March, it is stated, to vote on filtration-plant bonds. H. L. Kirk is Mayor and Prest. Board of Control.

## FINANCIAL NOTES

Commercial Bank, Jacksonville, Fla., has decided to increase capital to \$250,000.

Farmers' Bank, Olanza, S. C., has decided to increase capital from \$10,000 to \$25,000.

Palmetto National Bank, Columbia, S. C., has decided to increase capital to \$500,000.

Union Trust Co., Atlanta, Ga., has amended charter increasing capital from \$300,000 to \$1,000,000.

Union National Bank, Columbia, S. C., is authorized to increase capital from \$100,000 to \$150,000.

Carolina National Bank, Columbia, S. C., has decided to increase capital from \$200,000 to \$300,000.

Security Savings & Loan Co., Birmingham, Ala., has authorized increase in capital from \$500,000 to \$1,000,000.

West Texas Bank & Trust Co., San Antonio, Tex., has amended charter increasing capital from \$150,000 to \$250,000.

Stockholders of Old Town National Bank, Baltimore, Md., have decided to increase capital from \$200,000 to \$250,000.

The Elder-Dickinson Bank, Memphis, Tenn., has decided to change its name to the Depositors' Saving Bank & Trust Co. and increase capital from \$25,000 to \$50,000.

Citizens' National Bank and Anderson Banking & Trust Co., both in Anderson, S. C., have voted to merge under name of former institution with \$150,000 capital. Merger is to become effective in about 30 days.

## Utilizing the Intercoastal Canal.

[Special Cor Manufacturers Record.]

Galveston, Tex., January 17.

Coincident with the publication that the United States Army Board of Engineers had made recommendations for the completion of the Intercoastal Canal in its entirety from St. George's Sound, Fla., through to the Rio Grande at Brownsville, a distance of 970 miles, a meeting was held in Galveston today of representatives from cities between Galveston and Corpus Christi to take immediate steps to utilize the completed portion of the Intercoastal Canal between the cities named. A striking showing was made of tonnage already carried on the Galveston-Corpus Christi link, on the strength of which the Texas & Gulf Steamship Co. of Galveston definitely announced that a line of boats and barges would be installed within 60 days to serve the cities along the canal and streams tributary thereto.

It was demonstrated by reports from 13 of these cities that already there is a movement over the canal of 42,000 tons of exports and 510,000 tons of imports. Cities and towns not reporting are believed to be able to show as much again, of both exports and imports, so that without an organized effort or a regular line of boats or barges the value of the canal as a transportation facility has been impressively demonstrated and the possibilities of a vastly greater commerce conclusively shown.

Resolutions were adopted asking Congress to place for maintenance the entire Intercoastal Canal, completed sections and uncompleted, as well as the entrance to adjacent streams now or hereafter to be improved by the Government, under the indefinite appropriation section in the rivers and harbors act of March 3, 1909, for operation and care of canals and other works of navigation. Also, that Congress at once appropriate funds for the construction of the canal link between Galveston and Sabine River, which would give a canal from the Mississippi River to Corpus Christi.

There was much enthusiasm shown, and full appreciation evidenced of the possible benefits that the utilization of completely linked-up inland waterways will bring to the Gulf coast country commercially, industrially and agriculturally. A standing committee was appointed, with a member from each of the towns in the territory bordering on the canal and its tributaries, to look after the work of utilizing the canal to the fullest possible extent.

The meeting of today was the outcome of a visit made by Galveston business men by boat to the territory between here and Corpus Christi some weeks ago. Galveston is alive to the possibilities of waterway development, and the change that will come to the Gulf coast ports and the whole Gulf coast country on the completion of the Panama Canal. As showing how coming events are casting

their shadows before, it is significant to state that within a week there have been in the office of the Galveston Commercial Association representatives of half a dozen Japanese steamship companies, spying out the land with a view to making arrangements for the inauguration of Oriental steamship service to and from this port with the complete opening up of the Panama Canal. ALBERT PHENIS.

## Motor Trucks in Coal Trade.

[New York Journal of Commerce.]

That motor trucks have brought about a tremendous increase in delivery efficiency in the coal trade was shown clearly at the meeting of the Motor Truck Club at the Hotel Cumberland Wednesday evening. It proved to be one of the largest and most enthusiastic meetings the club has ever held, not only a record attendance of members being noted, but a large delegation from the coal trade and the body-building industry. During the evening six new members were admitted, making the present membership of the club about 245, as against a third that number a year ago.

It appeared from the testimony of the coal dealers present that the adaptation of motor trucks to the delivery of coal is largely influenced by two considerations: the availability of loading and unloading facilities for motor trucks and the tremendous difference between delivery demands in the summer and winter seasons—differences which call for a very elastic equipment, economically changed. The ideal plan for the coal dealer to pursue is to have two lines of business, as coal and ice, whereby he can change his trucks to different uses as the seasons change, or to have trucks which can be leased or operated for other lines of business when the coal business is slack. The demand was stated by one authority to be from five to ten times in the winter what it is in the summer.

Two views appear to control coal dealers: one that motor trucks may be more easily laid off in the summer than horses; the other directly the opposite. The one contended that horses "eat their heads off" in the summer; the other that the "overhead" on idle trucks is very expensive. It appeared that the driver is the largest factor in this question, the efficient driver being so rare and valuable as to make it impracticable to lay him off in the dull months and probably lose him. Drivers were stated to represent probably 90 per cent. of the motor truck problem, while horses can always be hired out to other concerns with traffic problems, and therefore readily shelved in the dull periods of the coal trade.

On the general efficiency of motor trucks it was agreed by coal dealers using them that horses are not more than half as efficient as motor trucks, especially in bad weather. Motors are more dependable and more flexible. Coal pockets are, unfortunately, not adapted to motor trucks as a rule, but the newer installations of pockets have made possible modern equipments with great economies.

The bulk of the evening was spent in discussing coal bodies for motor trucks, and several of the body makers exhibited photographs, showing their ideas for promoting quick and economical handling of coal and other materials. There appeared to be a wide variety of schemes—tilting, tipping, gravity and power dumping bodies, sectional bodies, side dumps, end

## LITHOGRAPHERS, PRINTERS, ENGRAVERS, EMBOSSEERS

Blank Books, All Kinds of Bank and Office Stationery and Office Supplies  
RUBBER STAMPS  
SEAL PRESSES  
AND STOCK  
CERTIFICATES  
Established 1872  
"THE BIG ALABAMA HOUSE"  
ROBERTS & SON  
ROBT. W. EWING, Pres.  
Newly Equipped 1912  
1810-12 Third Ave.  
BIRMINGHAM  
ALABAMA